

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * * *

In the matter of the application of)	
UPPER MICHIGAN ENERGY RESOURCES)	
CORPORATION for approval of a certificate of)	
necessity pursuant to MCL 460.6s for two)	
reciprocating internal combustion engine electric)	
generation facilities located in the Upper Peninsula)	Case No. U-18224
of Michigan, approval of certificate(s) of public)	
convenience and necessity, approval of a special)	
contract with Tilden Mining Company L.C., and)	
related accounting and ratemaking authorizations.)	
_____)	

At the October 25, 2017 meeting of the Michigan Public Service Commission in Lansing,
Michigan.

PRESENT: Hon. Sally A. Talberg, Chairman
Hon. Norman J. Saari, Commissioner
Hon. Rachael A. Eubanks, Commissioner

OPINION AND ORDER

I. HISTORY OF PROCEEDINGS

On January 30, 2017, Upper Michigan Energy Resources Corporation (UMERC) filed an application requesting approval of a certificate of necessity (CON) to build two reciprocating internal combustion engine (RICE) electric generation facilities in Michigan's Upper Peninsula (UP) pursuant to Section 6s of 2008 PA 286 (Act 286), MCL 460.6s, and the Commission's Filing Requirements and Instructions for Certificate of Public Convenience and Necessity Applications (Filing Requirements). UMERC also requested approval of certificates of public convenience and

necessity (CPCN), a Retail Large Curtailable Special Contract between WEC Energy Group, Inc., and Tilden Mining Company L.C. (Tilden) (Special Contract), and other accounting and ratemaking authorizations.

A prehearing conference was held on March 6, 2017, before Administrative Law Judge Martin D. Snider (ALJ). At the prehearing conference, the ALJ granted petitions for leave to intervene filed by the Association of Businesses Advocating Tariff Equity (ABATE),¹ Citizens Against Rate Excess (CARE), Cloverland Electric Co-operative (Cloverland), the Environmental Law and Policy Center (ELPC), Fibrek Inc., the Michigan Department of the Attorney General (Attorney General), MI NG Holding LLC, a wholly-owned subsidiary of GlidePath Development LLC (GlidePath), Michigan Technological University (MTU), Ontonagon County Rural Electrification Association (Ontonagon),² Tilden, Upper Peninsula Power Company (UPPCo), and Verso Corporation (Verso). The Commission Staff (Staff) also participated in the proceedings.

At a hearing on March 13, 2017, the ALJ granted UMEREC's motion for a protective order that was filed with the company's application, but denied UMEREC's request for an amended motion for protective order. The ALJ issued the protective order on March 14, 2017.

On May 22, 2017, the Staff, the Attorney General, ELPC, GlidePath, and UPPCo filed their direct testimony and exhibits, and on June 8, 2017, UMEREC and CARE filed rebuttal testimony and exhibits. On June 12, 2017, the Staff filed a motion to strike portions of UPPCo's direct testimony, and on June 16, 2017, UPPCo filed a response.

¹ ABATE did not participate further in the case.

² Ontonagon did not participate further in the case.

Evidentiary hearings were held on June 19-20, 2017, at which the ALJ granted in part and denied in part the Staff's motion to strike. UPPCo's direct testimony, page 8, line 21 through page 11, line 13; page 11, line 13; and page 11, lines 19-22 were stricken from the record.

Initial briefs were filed by UMER, the Staff, the Attorney General, CARE, Cloverland, ELPC, Fibrek, GlidePath, MTU, and UPPCo. Reply briefs were filed by UMER, the Staff, ELPC, GlidePath, and Tilden.

The ALJ issued a Proposal for Decision (PFD) on August 25, 2017. UMER, the Staff, CARE, Cloverland, ELPC, Tilden, and UPPCo filed exceptions on September 15, 2017. UMER, the Staff, CARE, Cloverland, Fibrek, and Tilden filed replies to exceptions on September 25, 2017. The record consists of 685 pages of transcript and 75 exhibits.

II. APPLICATION

A. Amended and Restated Settlement Agreement

On April 23, 2015, in Case No. U-17682 (April 23 order), the Commission approved an amended and restated settlement agreement (ARSA) between Wisconsin Energy Corporation (WEC), Integrys Energy Group, Inc. (Integrys), Wisconsin Public Service Corporation (WPS Corp), Michigan Gas Utilities Corporation (MGUC), the Staff, the Attorney General, Tilden, and Empire Iron Mining Partnership, which reflected an agreement among the parties that the UP is in need of a long-term solution to its energy needs. The ARSA established four objectives concerning energy issues in the UP: (1) new, clean electric generation shall be constructed in the UP – also known as the UP Generation Project; (2) the creation of a Michigan-only jurisdictional utility to facilitate the new generation; (3) the retirement of the Presque Isle Power Plant (PIPP); and (4) avoidance of future system support resource (SSR) payments. The ARSA also approved WEC Energy Group's acquisition of Integrys' Michigan subsidiaries, WPS Corp and MGUC.

The UP Generation Project is the end result of several commitments contained in the ARSA. Pursuant to WEC Energy Group's commitment under paragraph 6.g of the ARSA, Wisconsin Electric Power Company (WEPCo) and WPS Corp filed a joint application in Case No. U-18061 requesting Commission approval to form UMEREC, a wholly-owned subsidiary of WEC Energy Group. The Commission approved a settlement agreement in Case No. U-18061 on December 9, 2016, granting all approvals necessary for the formation of UMEREC. On January 1, 2017, UMEREC began providing electric and natural gas service to former Michigan customers of WEPCo and WPS Corp. 3 Tr 399-400.

B. Certificate of Necessity

Section 6s(1) of Act 286 states that an electric utility may submit an application to the Commission for a CON if the utility seeks to construct an electric generation facility, make significant investment in an existing electric generation facility, purchase an existing electric generation facility, or enter into a power purchase agreement (PPA) for the purchase of electric capacity for a period of six years or longer if the construction, investment, or purchase cost is \$500 million or more and a portion of the costs would be allocable to Michigan retail customers. Section 6s(2) of Act 286 states that the Commission may implement separate review criteria and approval standards for electric utilities with less than 1,000,000 retail customers who seek a certificate of necessity for projects costing less than \$500,000,000.

With its application, UMEREC submitted testimony stating that the company seeks to construct two electric generation facilities for a total project cost of \$277,200,000, and that the cost will be allocable to Michigan retail customers. UMEREC's application also indicated that both facilities, in total, are expected to have a nameplate capacity of approximately 183 megawatts (MW).

C. Certificates of Public Convenience and Necessity

UMERC's UP Generation Project includes two RICE electric generation facility sites.

UMERC will construct, own, and operate one RICE electric generation facility in Negaunee Township and will construct, own, and operate one RICE electric generation facility in Baraga Township. 3 Tr 349-350; Exhibits A-28, 29, and 30. UPPCo owns and operates an electric utility system and is engaged in the generation, distribution, and sale of electric energy in the service areas where UMEREC's proposed Negaunee Township and Baraga Township RICE electric generation facilities will be located. 4 Tr 513.

UMERC stated that the UP Generation Project sites were chosen because of their close proximity to natural gas fuel supply, electric transmission, existing roadways, and are located in rural areas with land available for purchase and favorable topography and environmental factors. The company contended that the construction of the new RICE electric generation facilities will not result in any duplication of facilities or services, will not provide any service to UPPCo retail customers in Baraga Township or Negaunee Township, and will enable the retirement of PIPP pursuant to Midcontinent Independent System Operator, Inc. (MISO) procedures. Application, pp. 11-12; 3 Tr 404-406. UMEREC stated that although its proposed Negaunee Township and Baraga Township RICE electric generation facilities will be located in UPPCo's service territory, they will be in a municipality in which UMEREC will not provide any electric service directly to the public. 4 Tr 513.

According to UMEREC, it is unclear whether MCL 460.502 requires the company to obtain a CPCN. The company noted that in the December 8, 1987 order in Case No. U-8941, the Commission granted WEPCo a CPCN when WEPCo's ownership of PIPP and related facilities were located in areas served by another utility, with the condition that WEPCo would not provide

electric service directly to the public in the municipalities where the facilities were located. *Id.* In this case, UMERC requested CPCNs, similar to the CPCN granted to WEPCo in Case No. U-8941, to construct, own, and operate the Negaunee Township and Baraga Township RICE electric generation facilities, but not to transact or carry on a local business. And, because UMERC does not plan to provide electric service to the public in either Baraga Township or Negaunee Township, the company stated that it did not obtain a franchise from either township pursuant to MCL 460.503(2). *Id.*, pp. 513-514. However, UMERC confirmed that it will obtain all required local permits and other approvals before commencing construction of the new RICE electric generation facilities in both townships. 3 Tr 361-362.

D. Tilden Special Contract

UMERC requested Commission approval of the Special Contract. UMERC noted that Tilden is a critical stakeholder in the UP's long-term generation solution, because "[f]or the foreseeable future, the remaining Tilden mine will account for about 40% of the UP load." UMERC's initial brief, p. 65, quoting 3 Tr 228. Therefore, pursuant to WEC Energy Group's and WEPCo's commitments under paragraph 6.g of the ARSA, WEC executed the Special Contract, Exhibit A-25, which states that UMERC will provide service to Tilden using RICE electric generation facilities. Once the UP Generation Project is complete, UMERC will terminate its PPAs with WEPCo and WPS Corp, WEPCo will retire PIPP, and any future SSR payments will be avoided for a period of 20 years. 3 Tr 232.

1. Other Special Contracts Between the Parties

In the April 23 order, the Commission approved a 2015-2019 Large Curtailable Special Contract between WEPCo and Tilden. Pursuant to that contract, WEPCo currently provides full requirements electric service to Tilden. 3 Tr 223. UMERC and Tilden are seeking Commission

approval to replace the 2015-2019 Large Curtailable Special Contract with the Tilden Special Contract, Exhibit A-25.

2. Terms of the Tilden Special Contract

UMERC stated that the Special Contract, Exhibit A-25, is effective upon the signing of both parties and continues through the conclusion of the Delivery Period and payment by Tilden of all amounts due under the contract. UMERB noted that the Delivery Period is defined as 20 years, beginning with the HE01 EST of the first day of the first month following the Commercial Operations Date. Once the Special Contract is effective, UMERB asserted that the company will provide full requirements service to Tilden. 3 Tr 146.

According to the Special Contract, UMERB stated that Tilden shall pay:

- (a) Fifty percent of the RICE electric generation facilities' capital costs (i) applicable to Tilden's non-firm planning load level; and (ii) future plant capital investment during the Special Contract term. *See*, Exhibit A-25 §§ 2.1.2.1. and 2.1.3.1;
- (b) One hundred percent of the actual RICE electric generation facilities' operations and maintenance (O&M) costs. *See*, Exhibit A-25 § 2.1.4.1.3;
- (c) A specified amount of generation administrative and general (A&G) expenses of the RICE electric generation facilities. *See*, Exhibit A-25 § 1.1;
- (d) One hundred percent of the actual distribution costs for service to Tilden, determined using a direct assignment method that is limited to UMERB's actual costs of transformation and associated distribution facilities at Tilden's location, using federal energy regulatory commission (FERC)-approved fixed charge methodology process. *See*, Exhibit A-25 § 2.1.4.1.1;
- (e) Pass-through of American Transmission Company (ATC), MISO, gas, energy and other charges and credits as specified in Exhibit A-25 §§ 2.1.5, 2.1.6, 2.1.7, 2.1.7.2, 2.1.8 and 2.1.9.

Exhibit A-25. UMERB noted that, effective January 1, 2017, WEC Energy Group assigned the Special Contract to UMERB. 3 Tr 147.

UMERC averred that the Special Contract and the ARSA will protect non-Tilden customers from the effects of voluntary or involuntary termination of the Special Contract. 3 Tr 153-154. In addition, UMERB stated, if the company cannot collect some capital costs from Tilden, UMERB will not seek to collect those costs from its non-Tilden customers. *Id.*

3. Commission Approval of the Tilden Special Contract

UMERC requested approval of the Special Contract pursuant to Mich Admin Code, R 460.2031(1) (Rule 31). Regarding the Special Contract, UMERB contended that:

- (a) The contract terms and conditions are reasonable and in the public interest;
- (b) UMERB's proposed RICE electric generation system will be capable of meeting Tilden's electric requirements without jeopardizing electric reliability and service to its other customers;
- (c) The contract will not impede the development of competition in UMERB's service territory;
- (d) Tilden had adequate opportunity to explore competitive alternatives to the Special Contract;
- (e) During contract negotiations, the parties protected their own interests and were represented by counsel; and
- (f) The Special Contract will benefit UMERB and its customers by allowing for the construction of new, clean UP electric generation (RICE electric generation facilities), consistent with the ARSA and the eventual retirement of PIPP.

Application, p. 14. UMERB also stated that the Special Contract provisions do not violate any statutes or Commission rules, orders, or clearly established policies, and will not harm other customers or otherwise adversely affect the public interest.

E. Accounting and Ratemaking Approvals

UMERC requested approval of the accounting and ratemaking treatment of financing costs incurred during the construction period as set forth in the March 14, 1980 order in Case

No. U-5281 (March 14 order). According to UMER, the March 14 order specified the computation of an allowance for funds used during construction (AFUDC) offset to construction work in progress (CWIP), with a corresponding adjustment to operating income. In the application, UMER stated that the computation of AFUDC will be on each monthly CWIP balance with the AFUDC offset rate being UMER's overall authorized rate of return. Additionally, the company indicated that, as required by the March 14 order, the capitalized AFUDC amounts will not be compounded. Application, p. 15.

UMER proposed to include CWIP in rate base with a 100% AFUDC offset. 3 Tr 96. According to UMER, this will not provide for a current return on CWIP, but will allow for a 100% deferred return on CWIP by accruing AFUDC on the entire CWIP balance during the construction period. UMER asserted that the deferred return on CWIP will ensure that customers do not pay more than necessary for carrying costs and allow UMER to recover construction carrying costs in future rates. *Id.* The company stated:

Total AFUDC is approximately \$11.5 million based on an AFUDC rate of 6.28% applied to 100% of the forecasted monthly CWIP balances. The AFUDC rate incorporates deferred income tax balances associated with the new generation project as zero cost capital with the remaining financing requirement split evenly between equity with a cost rate of 10.0% and debt with a cost rate of 4.2%.

Id., pp. 96-97.

UMER contended that the capitalization of AFUDC will result in an increase in the total capitalized cost of the new RICE electric generation facilities and will increase the revenue requirements of the RICE electric generation facilities after they are placed in service. The company also indicated in its application that it reserves the right under MCL 460.6s(12) to seek recovery of financing costs during construction if it files a general rate case based on a test year

occurring before the RICE electric generation facilities achieve commercial operation.
Application, pp. 15-16.

III. LEGAL STANDARDS

A. Section 6s of 2008 PA 286 versus Amended Section 6s of 2016 PA 341

On December 20, 2016, Governor Rick Snyder signed 2016 PA 341 (Act 341) into law, which amended Act 286, with an effective date of April 20, 2017. Although UMERB filed its CON application on January 30, 2017, the company stated in its initial brief that its application and evidence address both the Act 286 and the Act 341 versions of Section 6s. The Staff and Cloverland disagreed as to which version of Section 6s applies in this case.

Cloverland asserted that the Commission should apply Section 6s as amended by Act 341: “Legal precedent establishes that a change in law midway through a case may be applied to the case from the effective date going forward, unless doing so deprives a party of due process of law.” Cloverland’s brief, p. 8. Citing *Cusick v Feldpausch*, 259 Mich 349, 353-354; 243 NW 226, 227 (1932), Cloverland stated that “Michigan courts have held that a statutory right of action that has accrued is a vested right entitled to protection, of which the affected person(s) may not be deprived except by due process of law.” *Id.* Accordingly, Cloverland averred that UMERB’s right to file a CON application was preserved by Act 341, and therefore, any vested rights were not impaired by the amendment. Cloverland also argued that applying Section 6s of Act 341 to UMERB’s CON application is not retroactive application of the law because “the legal requirements in place at the time the Commission will issue its order in this case are those of Act 341.” *Id.*, p. 10. Finally, Cloverland noted that there was no saving clause included in Act 341 indicating that the legislature intended that the former provisions of Act 286 remain operational.

In response to Cloverland's assertion that the Commission must apply amended Section 6s to the application, UMEREC stated, "The purpose of this argument is unclear, as Cloverland does not cite any new requirement of § 6s that UMEREC's filing did not address." UMEREC's reply brief, p. 36. UMEREC reiterated that its proposal meets all requirements of Section 6s of Act 341, and that it has agreed to the more stringent standard on cost overruns set forth in Act 341.

The Staff stated that it is unnecessary for the ALJ and the Commission to determine which version of Section 6s applies because the outcome is the same. However, in the event the ALJ and the Commission address the issue, the Staff asserted that Cloverland's argument should be rejected because Act 341 cannot be applied retroactively.

According to the Staff, whether a statute applies retroactively is a question of legislative intent: "A statute is 'presumed to operate prospectively unless the contrary intent is clearly manifested.'" Staff's reply brief, p. 12, quoting *Frank W Lynch & Co v Flex Technologies, Inc*, 463 Mich 578, 583; 624 NW2d 180, 182 (2001). The Staff asserted that the "Michigan Supreme Court has repeatedly observed that the Michigan Legislature 'knows how to make clear its intention that a statute apply retroactively,' so the absence of express retroactive language likely means that the Legislature did not intend Act 341 to apply retroactively." *Id.*, quoting *Brewer v AD Transport Express, Inc*, 486 Mich 50, 56; 782 NW2d 475, 478 (2010).

The Staff argued that a change in the law that is applied midway through a case may be considered retroactive. The Staff noted that the Michigan Supreme Court considers four factors when deciding whether a law operates retroactively:

First, we consider whether there is specific language providing for retroactive application. Second, in some situations, a statute is not regarded as operating retroactively merely because it relates to an antecedent event. Third, in determining retroactivity, we must keep in mind that retroactive laws impair vested rights acquired under existing laws or create new obligations or duties with respect to transactions or considerations already past. Finally, a remedial or procedural act

not affecting vested rights may be given retroactive effect where the injury or claim is antecedent to the enactment of the statute.

Staff's reply brief, p. 13, quoting *LaFontaine Saline, Inc v Chrysler Grp, LLC*, 496 Mich 26, 38-39; 852 NW2d 78, 85-86 (2014).

The Staff contended that UMEREC had a vested right to CON proceedings as set forth under Act 286. According to the Staff, the ARSA was approved in the April 23 order, which required UMEREC to request a CON for electric generation under MCL 460.6s(3). The Staff argued that Act 286 was in effect when the ARSA was approved. Therefore, the Staff asserted, "retroactively applying Act 341 'presents problems of unfairness . . . because it can deprive citizens [in this case, UMEREC] of legitimate expectations and upset settled transactions.'" *Id.*, quoting *LaFontaine*, 496 Mich at 38.

The Staff also contended that Act 341 created "new obligations or duties with respect to transactions or considerations already past." *Id.*, quoting *LaFontaine*, 496 Mich at 39. The Staff stated that the "transaction" was UMEREC's application in this case and the "new obligations" are those imposed by amended Act 341. Although many provisions in Act 341 remain largely unchanged, the Staff described a few changes, including the obligation to compete with alternative proposals from suppliers who may now submit proposals directly to the Commission. The Staff concluded that Act 341 imposes new obligations that were not in existence when UMEREC filed its application, and therefore, applying Act 341 would be an unlawful, retroactive application of the law.

Agreeing with Cloverland, the ALJ found that UMEREC's right to file a CON was preserved by Section 6s of Act 341, that the Commission retained the authority to grant or deny UMEREC's CON application, and therefore, UMEREC's rights were not impaired by the amendments. The

ALJ also noted that “[a]ny rights UMEREC may attain by virtue of a final Commission order have not been established until the Commission issues its final order in this matter.” PFD, p. 79.

In response to the Staff’s argument, the ALJ found that because UMEREC’s application was submitted, and was pending, prior to the effective date of Act 341, there is no retroactive application of the law. The ALJ also noted that Act 341 sets forth legal requirements for the Commission’s final order in this case. In conclusion, the ALJ found that Section 6s of Act 341 is current law, and he recommended that the Commission apply the amended statute to this case.

No party filed exceptions. However, the Commission finds that it must disagree with the ALJ’s conclusion. It is undisputed that the effective date of Act 341 is April 20, 2017. As noted by the Staff, Michigan courts presume that statutes operate prospectively unless a contrary intent is clearly manifested. *Selk v Detroit Plastic Prod*, 419 Mich 1, 9; 345 NW2d 184, 187 (1984). The Commission finds that there is no clear indication in Act 341 that the Legislature intended that it apply retroactively.

In addition, the Commission finds that, as set forth by the Staff above, Michigan case law supports the application of Act 286 in this case. When the ARSA was approved on April 23, 2015, in Case No. U-17682, UMEREC had legitimate expectations that Act 286 would apply to the ARSA provisions. When UMEREC filed its application on January 30, 2017, nearly three months prior to the effective date of Act 341, UMEREC’s statutory rights vested under the provisions of Act 286. And, as the Staff explained above, Act 341 creates new obligations that impair UMEREC’s expectations and rights. Therefore, the Commission finds that the provisions of Act 286 shall apply in this case. However, as noted by the Staff, no matter which version of Section 6s is applied, the outcome is the same.

B. Burden of Proof

The Staff noted that “in matters before the Commission where statutory law is silent regarding the correct quantum of proof needed to review a utility’s costs, the Commission assesses those costs using the preponderance of the evidence standard adopted in civil cases.” Staff’s replies to exceptions, p. 4, quoting the October 17, 2013 order in Case No. U-15768, p. 16, citing *Residential Ratepayer Consortium v Public Service Comm*, 198 Mich App 144, 149; 497 NW2d 558, 561 (1993). And, according to the Staff, the Commission has held that “Section 6s did not alter the burden of proof in an administrative proceeding before the Commission.” *Id.*, quoting the January 28, 2013 order in Case No. U-17026, p. 33.

The Staff explained that preponderance of the evidence means “such evidence as, when weighed with that opposed to it, has more convincing force and the greater probability of truth.” *Id.*, quoting *People v Pugh*, 48 Mich App 242, 245; 210 NW2d 376, 378 (1973). The Staff stated that, according to the Michigan Supreme Court, preponderance of the evidence “is not satisfied by proof creating an equipoise, but it does not require proof beyond a reasonable doubt. No essential issue may be left to surmise, guess, or conjecture” *Id.*, quoting *Dillon v Lapeer State Home & Training Sch*, 364 Mich 1, 8; 110 NW2d 588, 591 (1961).

Thus, the Staff asserted, UMERB has the burden of proving its case by a preponderance of the evidence. If UMERB proves its case by a preponderance of the evidence, the Staff stated that other parties may still challenge that evidence, but the burden of proof shifts to the other parties. On pages 35-38 of the January 11, 2010 order in Case No. U-15768, the Staff noted that the Commission held that once a utility has satisfied its initial burden of proof, another party “may challenge that evidence and present evidence of unreasonableness.” However, at that point, the

other party “has the burden to demonstrate its position is correct.” Staff’s replies to exceptions, p. 5, citing the January 11, 2010 order in Case No. U-15768, p. 38.

No other party addressed the issue of burden of proof. The Commission agrees with the Staff that, in this CON proceeding, the preponderance of evidence standard applies.

IV. THE COMMISSION’S FILING REQUIREMENTS AND INSTRUCTIONS

Section 6s(10) of Act 286 requires the Commission to adopt standard application filing forms and instructions for use in all CON requests. On December 23, 2008, in Case No. U-15896, the Commission adopted Filing Requirements, which mirror the requirements set forth in Section 6s of Act 286. All utility CON requests must be consistent with the Filing Requirements. UMERL stated that its application and evidence satisfy both versions of Section 6s.

A. Certificate of Necessity Type

Pursuant to Section V of the Filing Requirements, UMERL must identify the relief requested. The utility may seek one or more of the certificates set forth in Section 6s(3) of Act 286. On page 7 of its application, UMERL stated that it is requesting a CON pursuant to Section 6s(3)(a), (b), and (d) of Act 286.

Section 6s(3)(a), (b) and (d) of Act 286 state:

An electric utility submitting an application under this section may request 1 or more of the following:

(a) A certificate of necessity that the power to be supplied as a result of the proposed construction, investment, or purchase is needed.

(b) A certificate of necessity that the size, fuel type, and other design characteristics of the existing or proposed electric generation facility or the terms of the power purchase agreement represent the most reasonable and prudent means of meeting that power need.

* * *

(d) A certificate of necessity that the estimated purchase or capital costs of and the financing plan for the existing or proposed electric generation facility, including, but not limited to, the costs of siting and licensing a new facility and the estimated cost of power from the new or proposed electric generation facility, will be recoverable in rates from the electric utility's customers subject to subsection (4)(c).

UMERC stated that the total capacity for the UP Generation Project to serve both Tilden and non-Tilden customers is 183 MW. UMERCE forecasted a 2017-2026 annual firm peak demand of 83 MW, plus a reserve margin of 15.6%, based on UMERCE's MISO capacity reserve margin projections. Thus, UMERCE stated that its peak demand, plus reserves, is 96 MW throughout the planning period. UMERCE noted that Tilden's load is expected to be non-firm, and therefore, the 96 MW in firm load did not include Tilden's load. 3 Tr 235, 361, 411-417; Exhibit A-19, pp. 3, 5.

UMERC stated that pursuant to Section 2.3 of the Special Contract, Tilden may nominate its planning load level, and that, as of January 30, 2017, Tilden's planning load level was set at 183 MW. 3 Tr 141. In its integrated resource plan (IRP), UMERCE contended that, given Tilden's planning load level and UMERCE's firm capacity needs for its non-Tilden load, 183 MW is an appropriate capacity level for UMERCE.

The company stated that it employed HDR Engineering, Inc. (HDR) to complete an evaluation of the power generation options in the Marquette and Keweenaw Peninsula areas to serve UMERCE's customers (HDR Report). UMERCE explained that the HDR Report concluded that the company's plan to construct RICE electric generation facilities at two separate sites would have the lowest generation cost for 140 MW of firm power with N-2 redundancy.³

According to UMERCE, the two-site plan, Option 1B in the HDR Report, reduces risk to UMERCE customers and provides other qualitative advantages such as: (1) the proposed RICE

³ N-2 redundancy refers to the minimum capacity with two generation units out of service. 3 Tr 233.

units provide far greater redundancy than a pair of 2x1 combined-cycle units; (2) RICE electric generation technology is specified in the Special Contract; (3) RICE plants are scalable because the engine modules come in 18 (or less) MW unit sizes; and (4) RICE plants require less transmission infrastructure to interconnect to the grid. 3 Tr 234.

UMERC contended that, in its IRP, the company evaluated several non-UP Generation Project alternatives, including a “no-build” business as usual (BAU) option, energy optimization (EO), renewable energy (RE), and distributed generation. In UMER’s opinion, none of these options are reasonable and prudent alternatives to the UP Generation Project. UMER stated that its IRP demonstrates that the UP Generation Project’s combination of technology and fuel is the most reasonable and prudent means to meet power needs of the company’s non-Tilden customers.

B. Certificate of Necessity That the Power to Be Supplied as a Result of the Proposed Construction, Investment, or Purchase Is Needed

Section VI of the Filing Requirements states that the utility shall identify the projected resource requirements, the expected timing of the requirements, along with an IRP that identifies the proposed course of action. UMER filed an IRP pursuant to Section 6s(11) of Act 286, which shall be addressed in more detail in the Integrated Resource Plan section *infra*.

C. Certificate of Necessity That the Design Characteristics of a Proposed Electric Generation Facility or Investment in an Existing Electric Generation Facility or the Terms of a Power Purchase Agreement Represent the Most Reasonable and Prudent Means of Meeting Future Power Needs

Section VII of the Filing Requirements lists 16 items the utility shall include in the CON application, if applicable. In this case, the applicable items are as follows:

1. A Written Description of the Proposed or Existing Site

On pages 5 and 7 of the testimony submitted with UMERC's CON application, the company provides a written description of the two sites selected for the proposed RICE electric generation facilities, along with the municipality in which the facilities will be constructed and the current use of those sites. *See*, 3 Tr 404-405; Exhibits A-28 through A-30, and A-40.

2. If Applicable, the Age of the Existing Facility or Facilities to Be Purchased or Modified

UMERC's CON application involves new construction only, and does not include purchase or modification of an existing facility. Therefore, this item in the Filing Requirements is not applicable.

3. The Expected Generating Technology and Major Systems

UMERC stated that it will use RICE technology for its new generation because it is particularly well-suited to provide a solution for long-term generation in the UP. According to UMERC, the pre-existing natural gas delivery infrastructure, with planned 1929 PA 9, MCL 483.101 *et seq.* (Act 9) modifications, ensures an adequate supply of natural gas to support a clean generation alternative to the continued operation of PIPP. UMERC averred that RICE technology can support large, utility-scale electric generation applications that are as reliable and efficient as other natural gas-fired electric generating technologies. In addition, UMERC claimed, RICE electric generation has the advantage of scalability – it can be sized to fit the load to be served more precisely, especially when the load is relatively small, and it reduces up-front capital costs. 3 Tr 401.

Regarding the major pollution control systems, UMERC stated that the engine exhaust system includes emissions control system components, silencers, and exhaust stacks. UMERC explained that the air emission control systems are comprised of selective catalytic reduction (SCR) using

urea to control nitrogen oxide emissions, and an oxidation catalyst to control carbon monoxide, volatile organic compounds, and hazardous air pollutants. Particulate matter and carbon dioxide (CO₂) emissions are controlled by good combustion practices. Sulfur dioxide emission controls are not needed as there is essentially no sulfur in the natural gas fuel. *Id.*, pp. 358-359.

4. Expected Nameplate Capacity, Availability, Heat Rates, Expected Life, and Other Significant Operational Characteristics

According to UMER, the UP Generation Project sites are expected to have a combined nameplate capacity of approximately 183 MW, and with regular maintenance, both sites are expected to have a 30-year useful life.

UMER stated that, compared to simple-cycle and combined-cycle gas turbine technologies, RICE units are more advantageous for the following reasons: (1) favorable availability and startup reliability statistics; (2) availability factors of 95% or better; (3) approximate 99% start reliability; (4) multi-shaft reliability; (5) maintenance outages may be staggered to avoid taking the entire plant offline; (6) an unplanned outage event for a single unit will not force the entire plant offline; (7) RICE units can start up and ramp load more quickly than most gas turbines, and can be designed to accommodate start times under 10 minutes; and (8) RICE units are more tolerant of altitude and ambient temperature than gas turbines. 3 Tr 355-356.

UMER also explained that “[m]odern utility-scale RICE generators have better full-load heat rates than gas turbines operating in simple cycle configurations, as well as traditional fossil-fueled steam generating plants.” *Id.*, at 356. According to UMER, the full-load heat rate of a single RICE unit is approximately 8,400 British thermal units per kilowatt-hour (Btu/kWh) higher heat value (HHV). Because of the operational flexibility afforded by multiple modular units, UMER claimed that the nominal full-load heat rate for each generation facility is expected to be approximately 8,400 Btu/kWh HHV for the majority of power demand scenarios.

UMERC argued that this benefit is even more pronounced at part-load operation. UMERC asserted that half the plant can be operated at full load, which will essentially maintain the full-load heat rate, depending on the auxiliary loads still running. However, the company stated, “if all reciprocating engines are ramped down to 50% load simultaneously, the resultant net heat rate is still competitive with the full-load heat rate of a gas turbine.” *Id.*

5. Fuel Type and Sources, Including the Identification and Justification of Fuel Price Forecasts Used Over the Study Period

In testimony included with UMERC’s application, the company stated that the RICE electric generation facilities will be fueled by natural gas delivered by the Northern Natural Gas (NNG) interstate pipeline. UMERC noted that the Baraga Township site is approximately 3.5 miles from the NNG pipeline, and the Negaunee Township site is less than one-half mile from the NNG pipeline. 3 Tr 362-363. According to UMERC, it has a Precedent Agreement with NNG to provide firm capacity to both sites and the agreement requires the construction of a compressor station and two town border stations (TBS) to move gas from the NNG pipeline to the laterals serving each RICE electric generation facility. *Id.*, p. 375.

UMERC stated that it contracted for approximately 100% firm capacity for the Baraga Township site and approximately 56% firm capacity for the Negaunee Township site. The company contended that the amount of firm capacity was appropriate and reasonable and consistent with the Special Contract. UMERC asserted that purchasing additional firm capacity is unnecessary and would significantly increase costs. *Id.*, pp. 376-377.

UMERC stated that it contracted with SEMCO Energy Gas Company (SEMCO) to construct, own, and operate the necessary gas laterals to move the gas from the interstate pipeline to the RICE electric generation facilities. UMERC noted that SEMCO has filed applications in Case Nos. U-18384 and U-18385 for Commission approval of CPCNs to construct the gas laterals.

According to UMER, it will use a flexible natural gas procurement process, which includes monthly commodity purchases and daily commodity purchases. UMER asserted that “Gas Traders will purchase natural gas according to the electric dispatch instructions provided by MISO for each site,” and that UMER’s portfolio used to serve the RICE electric generation sites will not share any assets with the portfolio for this purpose. 3 Tr 380.

Regarding the fuel forecasts, UMER stated that the IRP’s gas prices were based on the next three years of the November 9, 2016, New York Mercantile Exchange (NYMEX) Henry Hub futures prices, plus the rate of inflation, and that the company used the same fuel price forecast methodology as the WEPCo and WPS Corp power supply cost recovery (PSCR) cases filed in September 2016. UMER averred that its base case gas price is \$3.04 per million British thermal units (MMBtu). *Id.*, pp. 239-240.

6. Discussion of Rationale Behind Facility or Investment Technology, Fuel, Capacity, and Other Significant Design Characteristics

As set forth in section IV.C.2 above, UMER asserted that RICE electric generation technology is particularly compatible with the UP’s long-term generation needs. In addition, UMER stated that RICE electric generation is a mature technology that has been used for backup power for decades, due to its fast startup and ramping capabilities, and it is increasingly favored in utility-scale power generation and distributed power generation applications. 3 Tr 354. As demand for these units has grown, UMER explained, increased competition has driven engine manufacturers to develop models with increased electrical output, higher efficiency, greater operational flexibility, and improved reliability.

UMER claimed that worldwide, over 601 gigawatts of RICE generation is in operation in at least 176 countries. According to UMER, in the United States, there are 25 utility-scale RICE generation facilities in operation or under construction, representing over 200 engine units and

totaling over 1,400 MW in generating capacity. UMERB stated that RICE electric generation facilities are in operation in cold northern climates, including Alaska, Minnesota, and North Dakota, and a RICE facility is currently under construction by the Marquette Board of Light & Power in Marquette County. *Id.*, pp. 355-357.

7. A Description of All Major State, Federal, and Local Permits Required to Construct and Operate the Proposed Generation Facility or the Proposed Facility Upgrades in Compliance with State and Federal Environmental Standards, Laws, and Rules

UMERB stated that it would obtain all required major construction and operation permits and permissions, including: (1) all permits required by state and local units of government; (2) county soil erosion and sedimentation control permits; (3) local and/or Michigan Department of Transportation (MDOT) access to existing road permits; (4) local site plan approvals; and (5) MDOT permits for oversize/weight loads. 3 Tr 419-423, 425-435.

8. The Status of Any Transmission Interconnection Study and Identification of Any Expected or Required Transmission System Modifications

UMERB stated that it submitted its interconnection request to MISO for the UP Generation Project on September 2, 2016, and that MISO validated it as complete on September 8, 2016. According to UMERB, MISO assigned project number J703 to the Negaunee Township site and project number J704 to the Baraga Township site.

UMERB provided Exhibits A-8 and A-9, which are MISO's Generator Interconnection Feasibility Study results for each interconnection request and associated potential points of interconnection. UMERB stated that the Feasibility Study was posted to the MISO website on October 14, 2016, and that the results identified the milestone payments necessary for entry into the MISO Definitive Planning Phase (DPP) study cycle. According to UMERB, it submitted all technical documentation and payment required for entry to the MISO February 2017 DPP study

cycle. UMERC stated that on January 3, 2017, MISO confirmed that both generation projects, J703 and J704, would be included in the February 2017 DPP. 3 Tr 328.

UMERC also provided Exhibit A-6 and Confidential Exhibit A-7, which are requests to MISO to perform an optional interconnection study to determine the number of modular generators that can be located at the point of interconnection for each of the two generation facility sites to minimize network upgrades associated with the generation interconnection, as well as to expedite the process. 3 Tr 331. In addition, UMERC stated that the optional study will perform the necessary system impact study and facilities study, in advance, so that the timing for the DPP of the MISO generator interconnection process is significantly reduced, and so that it may be performed in parallel with the processing of UMERC's interconnection request. UMERC contended that the optional study will include the following: (1) needed studies (system impact studies, facilities studies – interconnection facilities and network upgrades) required in the MISO DPP; (2) planning level estimates on the interconnection and network upgrade costs for the Baraga Township and Negaunee Township sites; (3) per MISO's Attachment X tariff for Generator Interconnection Procedures, identify the transmission owner's interconnection facilities, system protection facilities, distribution upgrades, generator upgrades, and network upgrades; and (4) the estimated cost required to provide transmission services or interconnection service. *Id.*

Regarding the network upgrades funded under the MISO tariff, UMERC stated that if identified projects are already included in the MISO Transmission Expansion Plan, the interconnection customer can request that the project be expedited to meet the in-service date for the generation facility. UMERC explained that the interconnection customer is responsible for the costs associated with expediting the project, and as the interconnection customer, UMERC will be required to fund the entire cost of the identified transmission upgrades. In addition, UMERC

stated, if there are additional generator projects in the area and MISO determines that all generation projects should be studied as a group, any identified common-use upgrades for the study group will be cost allocated based on the pro rata share of the MW impact from each project on the constraints alleviated by the common-use upgrade. UMERC claimed that it will receive a refund of the amounts it paid for the network upgrades after commercial operation of the network resource generation facilities at the Baraga Township and Negaunee Township sites in MISO.

In terms of the timeline for the generator interconnection agreements (GIA), which allow the UP Generation Project to put power on the grid, UMERC stated that it submitted the required documentation and payments to enter the MISO February 2017 DPP on December 23, 2016. UMERC contended that the system impact studies and facilities studies will be finalized by October 2017, and UMERC will work with MISO and ATC to finalize the GIA and file with the FERC in November 2017. UMERC stated that the GIA will be conditioned on the retirement of PIPP. 3 Tr 333-335.

9. Natural Gas Infrastructure Required for Plant Construction and Operation Not Located on the Proposed Site but Required for Plant Construction and Operation

As discussed in detail in section IV.C.4 above, UMERC described the natural gas infrastructure required to construct and operate the RICE electric generation facilities.

10. A Description of Modifications to Existing Road, Rail, or Water Way Transportation Facilities Not Located on the Proposed Site, but Required for Plant Construction and Operation

UMERC stated that it will complete a transportation study to determine routes and modifications that may be required for existing roads, bridges, tunnels, etc., in order to transport and install the RICE electric generators. UMERC noted that the following routes and modifications may be necessary: (1) due to the weight of the engines, temporary modifications to roads during construction may be needed; (2) the engines may be shipped disassembled or already

assembled, depending on the size of the engines and the requirements of the site and/or transportation logistics; (3) the engines will ship to a nearby Great Lakes shoreline via barge, and then be unloaded for rail and/or road transport to the project site; (4) heavy haul transports can distribute the shipping weight so that the maximum load per axle is similar to common over-the-road trucks; and (5) accommodations for heavy haul may include escorts and night transport. 3 Tr 363.

UMERC stated that engine deliveries will be scheduled around seasonal road weight limitations, and that some roads may require upgrades to accommodate occasional shipments of lubricating oil and SCR re-agent to support normal plant operation. UMERG averred that it would consult with MDOT and appropriate local agencies during the transportation planning process, and that no permanent modifications to rail or waterway transportation infrastructure are anticipated. *Id.*, pp. 363-364.

11. Water and Sewer Infrastructure Required for Construction and Operation Not Located on the Proposed Site but Required for Plant Construction and Operation

UMERC claimed that no water or sewer infrastructure not located on the proposed sites is required for construction and operation. However, UMERG stated that water required for the construction and operation of both project sites will be supplied by municipal supplies, new on-site wells, or delivered by truck by a local water supplier. UMERG explained that processed wastewater will be captured by the facility drain system, routed to an underground holding tank, transferred to a tanker truck, and transported to an off-site treatment facility. According to UMERG, sanitary wastewater will be discharged to new on-site septic fields. *Id.*, p. 364.

12. A Basic Schedule for Development and Construction, Which Includes an Estimated Time Between the Start of Construction and Commercial Operation of the Facility or Facility Upgrades

UMERC provided Exhibit A-37, a project milestone schedule, and Exhibit S-1.5, a detailed construction schedule. UMEREC contended that after final regulatory approvals and giving notice to proceed to equipment suppliers and construction contractors, the company plans to begin construction of both generation facilities in the spring of 2018, staggered by two to three months. According to UMEREC, electric and gas interconnection facilities should be in service by late 2018, and gas pipeline improvements necessary to provide interruptible gas service are expected to be completed before the winter of 2019. UMEREC stated that commercial operation should begin at both generation facilities mid-year 2019. 3 Tr 364-365.

13. An Estimate of the Proportion of the Construction Workforce That Will Be Composed of Residents of the State of Michigan

UMERC contended that there will be a peak of approximately 100 construction workers at the Baraga Township site and approximately 200 at the Negaunee Township site. UMEREC stated that it will use a workforce composed of residents of Michigan whenever possible and economic. In UMEREC's estimation, 60% to 80% of the construction workforce will be drawn from local unions and Michigan residents. 3 Tr 365.

14. Descriptions of the Supply Alternatives to This Proposal That Were Considered, Including a "No-Build" Option, and the Justification for the Choice of the Proposed Project; Comparative Costs of Supply Alternatives; Supply Alternatives That Consider Energy Optimization and Renewable Energy

As discussed in section IV.A above, UMEREC stated that its IRP considered alternatives, such as a "no build" option, the justification for the choice for the proposed project, comparative costs of supply alternatives, EO, and RE. These issues are set forth in more detail in the IRP section *infra*.

15. Describe the Effect of the Proposed Project on Wholesale Market Competition

According to UMER, the UP Generation Project will have no effect on wholesale market competition. UMER noted that the UP Generation Project is located in the MISO energy market, which includes over 140,000 MW of generation, and the UP Generation Project is 183 MW. However, the company stated, the formation of UMER, the addition of the UP Generation Project, and the retirement of PIPP will reduce the amount of UP generation owned by WEC Energy Group. 3 Tr 244-245.

16. Any Other Information That the Applicant Considers Relevant

UMER did not include any additional information for this item.

D. Certificate of Necessity That the Estimated Capital or Purchase Costs of the New or Existing Electric Generation Facility or the Investment in an Existing Electric Generation Facility Will Be Recoverable in Rates from the Electric Utility's Customers

Section VIII of the Filing Requirements states that an application seeking a CON to construct a new electric generation facility shall provide an estimate of the costs required for the specified purchase or construction, as well as projected facility operation costs. The cost estimates for the construction of a new facility shall include four items, if applicable. UMER addressed the two applicable items as follows:

1. To the Extent Applicable and Available, Engineering, Procurement, and Construction Costs, Transmission Interconnection Costs, Owner's Costs, and Project Financing Costs

UMER stated that it selected Burns & McDonnell as the UP Generation Project's engineering contractor. The company claimed that Burns & McDonnell is a leading United States-based engineering, procurement, and construction (EPC) contractor with RICE electric generation facilities experience. According to UMER, the company will use Burns & McDonnell for its contract strategy as follows: (1) RICE engines will be competitively bid and

purchased by UMER; (2) other plant equipment will be competitively bid and purchased by either Burns & McDonnell or UMER; and (3) construction and start-up services, equipment procurement, construction and testing start-up services contracts will be competitively bid and awarded within timeframes to achieve a planned in-service date of mid-2019. 3 Tr 365-366.

UMER stated that Burns & McDonnell provided a total installed cost estimate for EPC costs for the generation facility. The company noted that it prepared the electric and gas interconnection costs and owners' costs, which includes internal labor, permitting, licensing, and land acquisition costs. *Id.*, p. 367. UMER's estimated UP Generation Project cost (in 2016 dollars) is as follows:

EPC	\$225,700,000
Electric & Gas Interconnection	\$18,000,000
Owners	\$22,000,000
Total	\$265,700,000
Allowance for Funds Used During Construction	\$11,500,000
Total Project Cost with AFUDC	\$277,200,000

UMER stated that the total project cost of \$277,200,000 includes an estimated \$15 million for an air quality control system (AQCS), and that the UP Generation Project will be owned 100% by UMER. *Id.*, p. 147.

2. For New Construction, the Application Shall Include the Expected Typical Annual Costs Associated With Operating the Facility, Including Fuel, Operations and Maintenance, and Environmental Compliance

UMER stated that Burns & McDonnell provided the company's non-fuel O&M cost estimate factors based on dollars-per-kWh costs for O&M, inclusive of labor, consumables, and environmental compliance. UMER explained that these factors were applied to the expected power production of the proposed RICE electric generation facilities. In addition, UMER stated

that SEMCO provided the gas lateral O&M costs. According to UMER, the UP Generation Project estimated annual costs are as follows:

O&M Costs	\$5,300,000
Property Taxes	\$5,900,000
Firm NNG Natural Gas Transportation Fees	\$4,300,000

3 Tr 369 and 378. UMER stated that Exhibit A-19, pages 10-11 show the company's fuel cost estimates at \$3.04/MMBtu (average annual price) in the base case. UMER contended that it expects to capitalize major maintenance costs, including major engine overhauls and catalyst replacement costs. *Id.*, p. 369.

V. INTEGRATED RESOURCE PLAN

Pursuant to Section 6s(4) of Act 286, the utility shall demonstrate through an approved IRP that the power to be supplied by the proposed electric generation facility is needed. The electric utility shall submit an IRP with its CON application that includes all of the following:

- (a) A long-term forecast of the electric utility's load growth under various reasonable scenarios;
- (b) The type of generation technology proposed for the generation facility and the proposed capacity of the generation facility, including projected fuel and regulatory costs under various reasonable scenarios;
- (c) Projected energy and capacity purchased or produced by the electric utility under any renewable portfolio standard;
- (d) Projected energy efficiency program savings under any energy efficiency program requirements and the projected costs for that program;
- (e) Projected load management and demand response savings for the electric utility and the projected costs for those programs;
- (f) An analysis of the availability and costs of other electric resources that could defer, displace, or partially displace the proposed generation facility or PPA, including

additional renewable energy, energy efficiency programs, load management and demand response, beyond those amounts contained in subdivisions (c) to (e); and

(g) Electric transmission options for the electric utility.

MCL 460.6s(11).

UMERC averred that it prepared an IRP that meets all the requirements of Section 6s(11) of Act 286 and the Commission's IRP Filing Guidelines, Attachment B, in the December 23, 2008 order in Case No. U-15896. According to the company, the IRP reflects service to all the company's customers (including Tilden) with an IRP planning period of 30 years starting in 2019. UMERG stated that the IRP compared: (1) the company's service to its non-Tilden customers once the UP Generation Project achieves commercial operation; and (2) the BAU approach, where UMERG would continue to serve its customers under its PPAs with WEPCo and WPS Corp, and WEPCo continues to operate PIPP until its replacement with transmission in 2025. 3 Tr 224; Exhibit A-19.

In UMERG's opinion, the IRP demonstrates that the proposed RICE electric generation facilities provide a lower net present value (NPV) of \$161 million over a 30-year period for non-Tilden customers versus BAU. The company stated that the IRP considered other non-RICE options to meet UMERG's energy needs, including energy efficiency programs and electric transmission efficiencies, and concluded that the UP Generation Project is the most reasonable and prudent. 3 Tr 227. UMERG's IRP addressed the requirements of Section 6s(11) of Act 286, as set forth below.

A. The Long-term Forecast of the Electric Utility's Load Growth Under Various Reasonable Scenarios

In its IRP, UMERC provided a long-term energy requirements forecast by the following categories: rate class, street lighting, total retail, company use, losses, and company total. In addition, the company provided firm peak demand requirements through 2026.

UMERC forecasted a firm peak demand of 83 MW throughout the study horizon. The company explained that beginning in June 2019, coinciding with the start of commercial operation of the RICE units, all obligations of the Wisconsin Electric Rate Zone 8 and the Wisconsin Public Service Rate Zone, including the load associated with the Tilden mines, are assumed to be reassigned to UMERC-Total. 4 Tr 472. As a result of this structural change, the company stated that there is a significant increase in total forecasted energy requirements in this timeframe. From 2019 through the end of the study period, however, UMERC contended that total forecasted energy requirements remain relatively constant. With respect to forecasted peak demand, UMERC asserted that there is no significant increase associated with this reassignment in 2019, due to the fact that the Tilden mine load is fully curtailable. Therefore, UMERC stated, the addition of Tilden to UMERC-Total does not impact the company's firm peak demand requirements. *Id.*

B. The Type of Generation Technology Proposed for the Generation Facility and the Proposed Capacity of the Generation Facility, Including Projected Fuel and Regulatory Costs Under Various Reasonable Scenarios

UMERC stated that Exhibit A-1 describes the company's proposed gas-fueled RICE electric generation units in multiples of up to 18 MW each. The company stated that the total combined size of both facilities is 183 MW, which satisfies the capacity specified in the Special Contract and meets the expected planning load. 3 Tr 234, 328-331.

According to UMERC, the RICE technology operates on a four-stroke cycle with spark ignition of natural gas fuel in the engine cylinders, similar to automobile engines, and the engine's

drive shaft turns an electric generator to produce energy. The company stated that the support systems include engine exhaust, engine cooling, emission control systems, fuel supply system and compressed air system. 3 Tr 354-360.

The company considered supply-side resources, such as new combined-cycle units, the continued operation of PIPP, and other non-fossil fuel supply alternatives. However, according to the IRP, the UP's load characteristics limit viable options. The company stated that a purchase power option without new transmission is not a practical option because the area is considered a load pocket and power purchased outside of the PIPP/mines area cannot serve the load due to transmission constraints. In addition, UMERB stated that continued operation of PIPP, construction of new transmission infrastructure, or construction of combined-cycle units do not provide the redundancy and reliability needed to serve UP load. *Id.*, pp. 199-200, 228, 232-233, 255.

UMERC's Exhibit A-1 includes the HDR Report, which evaluated and compared the costs of supply alternatives including simple-cycle combustion turbines, combined-cycle combustion turbine plants, conversion of PIPP to natural gas firing, and retrofitting PIPP with AQCS on a project-cost basis and a cost-of-generation basis in dollars per megawatt-hour (MWh). *Id.*, pp. 200-202. The company noted that the HDR Report concluded that "RICE technology provides the lowest evaluated cost for generating 140 MW of firm power with N-2 redundancy in the Marquette and Keweenaw Peninsula areas (Option 1B). The redundancy requirements of the area support selection of multiple smaller generators as a single unit outage has a lesser impact." *Id.*, p. 202.

UMERC stated that the HDR Report provided an analysis of single- and two-site options, and it concluded that the proposed RICE electric generation facilities should be located on separate

sites in Negaunee Township and Baraga Township. 3 Tr 349-351; Exhibits A-1 and S-1.1. The company argued that the two-site location accomplishes the following: (1) meets the requirements of the Special Contract; (2) eliminates the need for \$373 million in major transmission network upgrade expenditures, including the MISO Board-approved transmission project Plains-to-National 138 kilovolt (kV) transmission project, and the proposed project in the MISO project database, the Lakota-Winona line rebuild from 69 kV to 138 kV; (3) minimizes the costs to interconnect the electric generation facilities to the electrical grid; and (4) allows for the retirement of PIPP. *Id.*, p. 330.

UMERC noted that the natural gas price forecast in the IRP is based on the November 9, 2016 NYMEX Henry Hub futures price, adjusted for inflation. According to the company, the natural gas industry consensus opinion is that natural gas prices will remain relatively inexpensive throughout the foreseeable future, and UMER's price assumptions are consistent with these industry assumptions and forecasts. However, due to risk associated with fuel price volatility, UMER's IRP included a fuel price sensitivity analysis. *Id.*, pp. 239-240.

UMERC explained that the uncertainty and sensitivity analysis used higher gas prices and CO₂ emission limits to evaluate the robustness of the least-cost plan, if key assumptions resulted in errors, and a forecast of electric load, including customer load and sales by customer class. 3 Tr 244; Exhibit A-19, pp. 3-4. According to UMER, the company's forecasted load is expected to be flat for the 10-year study period and will not be significantly affected by factors such as load management, demand response, electric choice participation, energy efficiency measures, RE portfolio standards, or legislative or societal developments. *Id.*, pp. 232, 240; Exhibit A-19, pp. 4-7, 10.

C. Projected Energy and Capacity Purchased or Produced by the Electric Utility Under Any Renewable Portfolio Standard

UMERC argued that RE resources, including wind, solar, and solar battery storage, are unable to provide reliable energy in the amount required during every hour of the year. In the company's opinion, even if RE resources were used to provide a portion of the 183 MW proposed for the UP Generation Project, the RICE electric generation facilities would still be needed in their entirety to meet the UP's reliability needs. 3 Tr 232-233.

D. Projected Energy Efficiency Program Savings Under Any Energy Efficiency Program Requirements and the Projected Costs for that Program

In its IRP, UMERG noted that WEPCo and WPS Corp have filed and received Commission approval in four EO cases. The company stated that according to the 2016-2017 plans approved by the Commission, WEPCo and WPS Corp had EO surcharges designed to collect 2% of their Michigan retail electric revenues, which are paid to Efficiency United, the EO program administrator. Exhibit A-19, p. 6. UMERG contended that it adopted both WEPCo's and WPS Corp's 2017 EO plans, and intends to meet the energy waste reduction (EWR) requirements of 2016 PA 342 (Act 342) by continuing to pay Efficiency United 2% of its sales revenues. The company's 2018-2019 EWR plan was filed on July 3, 2017, in Case No. U-18266, which states that UMERG plans to continue to use Efficiency United to administer its EWR program.

E. Projected Load Management and Demand Response Savings for the Electric Utility and the Projected Costs for Those Programs

Regarding the projected load management and demand response savings and projected costs for these programs, UMERG stated that the Special Contract has a 20-year term starting the first day of the first month following commercial operation of the UP Generation Project. *Id.*, p. 147. UMERG contended that, absent adjustments to the contract, Tilden will be a 100% non-firm

customer, and that the company has an additional capacity resource of 19 MW with its other non-firm load, non-Tilden customers. *Id.*, p. 232. UMERB also noted that customers will have the ability to become interruptible or curtailable. *Id.*, pp. 415-416.

F. An Analysis of the Availability and Costs of Other Electric Resources That Could Defer, Displace, or Partially Displace the Proposed Generation Facility or Power Purchase Agreement, Including Additional Renewable Energy, Energy Efficiency Programs, Load Management and Demand Response, Beyond Those Amounts Contained in Subdivisions (c) to (e)

UMERB stated that the IRP analyzed resource options other than those identified in Section 6s(11)(c)-(e) of Act 286, including additional RE, EO programs, load management, and demand response as set forth above. 3 Tr 232-233.

G. Electric Transmission Options for the Electric Utility

According to UMERB, until the RICE electric generation proposal, transmission was considered the only viable alternative that would allow for the retirement of PIPP. The company stated that the two-site UP Generation Project is specifically designed and planned to eliminate a significant \$373 million capital investment in new and upgraded transmission lines. Staff Exhibit S-1.2 lists the transmission projects that would be deferred or displaced by the UP Generation Project.

VI. POSITIONS OF THE PARTIES

A. The Commission Staff

The Staff recommended that the Commission approve UMERB's request for the CONs and the following two CPCNs: (1) authorize UMERB to construct, own, and operate a RICE electric generation facility, but not to transact or carry on a local business in Baraga Township, Baraga County; and (2) authorize UMERB to construct, own, and operate a RICE electric generation

facility, but not to transact or carry on a local business in Negaunee Township, Marquette County. However, the Staff contended that the Commission's approval of UMERC's application should be conditioned upon SEMCO receiving a CPCN to construct, own, and operate the Baraga natural gas pipeline and the Negaunee natural gas pipeline, and receiving approval of the gas transportation agreements for the pipelines.

The Staff noted that, pursuant to Section 6s(4) of Act 286, the Commission shall grant the utility's CON request if it determines that: (1) the utility has demonstrated a need for power through its approved IRP under subsection (11); (2) the information supplied by the utility indicates that the proposed electric generation facility will comply with all applicable state and federal environmental standards, laws, and rules; (3) the estimated cost of power from the proposed electric generation facility is reasonable; (4) the proposed electric generation facility represents the most reasonable and prudent means of meeting the power need relative to other resource options; and (5) to the extent practicable, the construction of the new facility is completed using a workforce composed of residents of Michigan. The Staff addressed these issues *ad seriatim*.

1. A Need for Power is Demonstrated Through an Integrated Resource Plan

The Staff agreed with UMERC that the company complied with Section 6s(11) of Act 286 and the Commission's IRP Filing Requirements and demonstrated a need for power that would be supplied from the proposed RICE electric generation facilities. The Staff stated that in UMERC's IRP, the company sufficiently evaluated alternatives to the proposed RICE electric generation facilities, including the continued operation of PIPP, a new combined-cycle unit, RE, EWR, load management, demand response, and electric transmission options. The Staff concluded that UMERC's proposed RICE electric generation facilities are the most reasonable and prudent means

of meeting the company's energy and capacity needs relative to other resource options for meeting demand, including EO programs and electric transmission efficiencies. The Staff addressed the specific subsections of Section 6s(11) below.

a. Section 6s(11)(a) of 2008 PA 286

The Staff cited UMERC's long-term forecast of energy requirements, which were broken into several categories: rate class, street lighting, total retail, company use, losses, and company total. In addition, the Staff noted that UMERC provided firm peak demand requirements through 2026. 4 Tr 471-472. The Staff asserted that the assumptions and the methodology employed by UMERC in developing the company's long-term energy and demand forecast are reasonable, and concluded that UMERC's energy and demand forecast meet the requirements of Section 6s(11)(a) of Act 286. *Id.*, p. 472.

b. Section 6s(11)(b) of 2008 PA 286

The Staff agreed with UMERC that the company's IRP contained a description of the type of generation technology and capacity of the proposed generation facilities. The Staff noted that UMERC's IRP considered supply-side resources, including new combined-cycle units, the continued operation of PIPP, and other non-fossil fuel supply alternatives, and that the IRP persuasively identified UP load characteristics that limit the company's options. 4 Tr 473-474. As a result, the Staff agreed with UMERC that RICE technology provides the lowest evaluated cost of generation for new generation options and is considerably less expensive than other options, including the continued operation of PIPP. *See*, Exhibits A-1 and S-1.1.

The Staff noted that the proposed 183 MW capacity satisfies the capacity specified in the Special Contract and meets the expected planning load. 4 Tr 476.

In addition, the Staff averred that UMERC's IRP included projected fuel and regulatory costs under various reasonable scenarios, and found that the method used by UMERC to forecast natural gas prices was reasonable. *Id.*, pp. 473-475. Specifically, the Staff stated that the high gas price sensitivity used by UMERC, with a baseline expectation plus \$1/MMBtu, appears moderate given the historical volatility of natural gas prices. *Id.*, p. 477. Therefore, the Staff concluded that UMERC's IRP complied with the requirements of Section 6s(11)(b) of Act 286.

c. Section 6s(11)(c) of 2008 PA 286

The Staff stated that UMERC's application included an appropriate evaluation of RE alternatives. The Staff noted that UMERC does not have any company-owned generation resources in its supply portfolio, and UMERC is planning to build a generation option to fully provide supply and reliability to its customers. 4 Tr 499-500. According to the Staff, UMERC considered renewable alternatives, including wind and solar, to supply a significant portion or all of the company's generation needs. However, the Staff stated, given the current technology available, even if renewables displaced some capacity, UMERC demonstrated in its IRP that the proposed 183 MW RICE electric generation units would still be needed to ensure system reliability. *Id.*, p. 500. The Staff recommended that in UMERC's future IRP, the company should build upon and add to the company's generation portfolio by including a more robust evaluation of RE alternatives.

d. Section 6s(11)(d) of 2008 PA 286

Regarding UMERC's evaluation of projected energy efficiency program savings and costs, the Staff evaluated the company's current and planned EWR efforts. The Staff noted that, according to UMERC, WEPCo and WPS Corp have filed and received approval for four EO plans, and that the most recently-approved plans for 2016 and 2017 are set forth in Exhibit A-19, page 6. The

company stated that it adopted both WEPCo's and WPS Corp's 2017 EO plans, and will meet the EWR requirements of Act 342 by continuing to pay Efficiency United 2% of its sales revenues. 4 Tr 505-506. UMERC filed its 2018-2019 EWR plan on October 3, 2017, in Case No. U-18266, and plans to continue to use Efficiency United to administer its EWR program. The Staff concluded that UMERC evaluated energy efficiency program savings and costs pursuant to Section 6s(11)(d) of Act 286, but recommended that the company's future IRP contain a more robust analysis that considers levels of EWR resources in UMERC's portfolio. *Id.*, p. 506.

e. Section 6s(11)(e) of 2008 PA 286

The Staff evaluated the load management and demand response savings and costs included in UMERC's IRP. The Staff noted that, according to the Special Contract, Tilden is expected to be a 100% non-firm customer unless adjusted voluntarily or involuntarily pursuant to the terms of the contract. 4 Tr 477. In addition, the Staff stated that UMERC indicated that other customers account for an additional 19 MW of non-firm load. The Staff stated that it "is encouraged by the large amount of load management the Company has in its relatively small resource portfolio." *Id.*, p. 478. However, the Staff asserted that there is room for improvement in UMERC's demand response and agreed with UMERC that the company does not have enough demand response resources to eliminate the need for baseload generation. *Id.*

f. Section 6s(11)(f) of 2008 PA 286

The Staff agreed with UMERC that there were no other available electric resources that could defer, displace, or partially displace the company's RICE electric generation project. The Staff asserted that:

UMERC has included an analysis of available electric resources both in the HDR Report sponsored by Company witness Andrew Sutherland and the 2016 Integrated Resource Plan sponsored by Company witness Jeff Knitter. Staff also recognizes the uniqueness of UMERC, being a newly formed electric utility in Michigan. It

serves a relatively small load as compared to other regulated electric utilities in Michigan. Being a newly formed utility, it does not possess a large portfolio of electric generation resources. In fact, the RICE project will represent the backbone of UMERC's anticipated generation portfolio. Mr. Knitter discusses other supply options such as renewable [sic], demand response, energy efficiency and distributed generation in the 2016 Integrated Resource Plan. The Company concludes that due to the sheer magnitude of the need for reliable electric generation, the need for the RICE project cannot be replaced by alternative resources such renewable, demand response, energy efficiency and distributed generation alone.

4 Tr 478-479.

g. Section 6s(11)(g) of 2008 PA 286

The Staff noted that pursuant to Section 6s(11)(g) of Act 286, UMERC's IRP provided an analysis of available transmission options in conjunction with continued PPAs. The Staff explained that transmission options have been thoroughly evaluated by UMERC and MISO over the past several years, and that transmission was considered the only viable alternative that would allow for the retirement of PIPP – that is, until the RICE project was proposed. 4 Tr 479.

According to the Staff, the two-site design of the RICE project was specifically planned to alleviate the immediate need for significant investment in new and upgraded transmission lines that would have an estimated capital cost of \$373 million. The Staff stated that Exhibit S-1.2 includes a list of the transmission projects that are deferred or displaced by the proposed RICE project. As a result, the Staff concluded that UMERC's IRP satisfies the requirements of Section 6s(11)(g) of Act 286.

2. Applicable Permits and Other State and Federal Laws

In response to a Staff audit request, UMERC stated that two Michigan Department of Environmental Quality (DEQ) air permits will be required for the UP Generation Project: a Permit to Install and a Title V Renewable Operating Permit. *See*, Exhibit S-2.1. UMERC also responded to a Staff audit request listing numerous permits that may be required or will be required to

construct and operate the UP Generation Project RICE units. *See*, Exhibits S-2.2 and S-2.3. In the Staff's opinion, UMERB has met the requirements of Section VII, Part A, subpart 7 of the Filing Instructions. 4 Tr 490-491.

Additionally, the Staff asserted that UMERB has adequately addressed the need for water and sewer infrastructure, and therefore has met the requirements of Section VII, Part A, subpart 11 of the Filing Instructions. *Id.*, pp. 491-492.

Finally, the Staff stated that based on the information provided in Exhibits S-2.1, S-2.2, and S-2.3, UMERB's proposed RICE units will comply with all applicable state and federal environmental standards, laws, and rules, as required by Section 6s(4)(b) of Act 286. *Id.*, p. 492.

3. Estimated Cost of Power from the Proposed Electric Generation Facility

The Staff did not present any evidence to rebut UMERB's cost estimates. The Staff recommended Commission approval of a CON for \$277,200,000, and stated that the company's competitive bidding process, as set forth in Exhibit S-1.4, would ensure that the project costs are reasonable. 4 Tr 481.

4. The Proposed Electric Generation Facilities Represent the Most Reasonable and Prudent Means of Meeting the Power Need Relative to Other Resource Options

As set forth above in section VI.A.2, subsections c-g, the Staff concluded that UMERB considered other resource options for meeting power demand, including energy efficiency programs, transmission efficiencies and upgrades, and other alternatives, and determined that the RICE electric generation facilities were the most reasonable, prudent, and least-cost means of meeting the power need in the UP.

5. Construction of the New Electric Generation Facilities is Completed Using a Workforce Composed of Michigan Residents

The Staff stated that based on the testimony provided by UMER, the Staff believes that the company has complied with the requirements of Section 6s(4)(e) of Act 286. 4 Tr 461-462.

6. Section 6s(6) and (9) Costs Approved for the Construction of the Electric Generation Facility

UMER included a \$26,500,000 project contingency in the estimated project cost, and the Staff supported the contingency. However, because this is not a rate proceeding, the Staff recommended that project costs not be included in rates until UMER files a rate case that includes a request to include such costs in rates.

7. Reports Regarding the Status of Any Project for Which a Certificate of Necessity Has Been Granted

The Staff recommended that the Commission require UMER to file annual Section 6s(7) reports that include “sufficient detail regarding the status of each RICE electric generation project, including transmission interconnections and gas supply infrastructure, describe any changes in timing and/or scope, the money expended on each project, etc.” 4 Tr 463.

8. Natural Gas Supply for the Proposed Upper Peninsula Generation Project

The Staff noted that SEMCO, the local gas utility serving natural gas to Baraga Township and Negaunee Township, has filed applications in Case Nos. U-18384 and U-18385 requesting Commission approval to construct, own, and operate the Baraga pipeline and the Negaunee pipeline to transport natural gas from the NNG pipeline to UMER’s two proposed electric generation facilities. 4 Tr 514. NNG’s interstate pipeline does not have enough firm natural gas transportation capacity to supply 100% of UMER’s natural gas needs, and as a result, UMER executed the Precedent Agreement with NNG to increase natural gas pipeline transportation capacity so sufficient transportation capacity is available for the electric generation plants. *Id.*

In addition, the Staff stated, construction of a compressor station on the NNG pipeline will be required to provide sufficient natural gas transportation capacity. According to the Staff, currently, NNG can provide natural gas transportation for 100% electric generation capacity for UMERC's Baraga Township site and approximately 56% electric generation capacity at the Negaunee Township site. *Id.*, p. 516. The Staff stated that pursuant to the UMERC/NNG agreement, approximately 113 MW of generation will have firm fuel supply 24 hours a day, seven days a week. *Id.*, p. 517.

The Staff also noted that SEMCO has an application pending in Case No. U-18202 to construct, own, and operate the Marquette natural gas pipeline to improve reliability in the Marquette area. The Staff contended that, in the future, UMERC could utilize SEMCO for natural gas transportation services and operation at the Negaunee Township site with minimal interconnection, which could allow the electric generation plants to operate at a higher than forecasted capacity. *Id.*, p. 518.

According to the Staff, station power will be provided via back feed from ATC and the transmission company serving the generation plants. The Staff stated that each station will also maintain UPPCo electric service as back-up supply. 4 Tr 519; Exhibit S-3.1.

9. Tilden Special Contract

The Staff supported Commission approval of the Special Contract, agreeing with UMERC that the contract will provide significant benefits to non-Tilden customers, as compared to the current power supply agreements with WEC Energy Group, Inc., and will reduce non-Tilden customers' risk exposure. 4 Tr 525. The Staff stated that UMERC's non-Tilden customers will save \$161 million in NPV over 30 years compared to the next best alternative. However, the Staff

opposed UMERC's request to allocate the CON costs of \$277,200,000 consistent with the provisions of the Special Contract.

According to the Staff, UMERC did not provide sufficient information to meet the Commission's requirements for special contract ratemaking approvals. *Id.*, pp. 525-526. The Staff stated that in the March 23, 1995 order in Case No. U-10646 (March 23 order), the Commission laid out the general principles of the ratemaking effects of special contracts. The Staff contended that because UMERC has only existed as an entity for a short time, and Tilden is not currently a UMERC customer, the company could not, and did not, present the cost of service study (COSS) as required by the March 23 order. The Staff asserted that until UMERC files for rate relief associated with the Special Contract discount (if any) in a general rate case, which includes Tilden as a customer, and provides the information required in the March 23 order, the Commission should not approve the ratemaking treatment associated with the Special Contract. *Id.*, p. 526. The Staff admitted that its position creates some risk for UMERC, but argued that the risk is minimal and the benefits to non-Tilden customers will likely outweigh the costs. *Id.*, p. 527.

B. Michigan Department of the Attorney General

The Attorney General recommended that the Commission grant UMERC's application with the following conditions and recommendations:

1. The Commission establish a condition in approving the CON application that non-Tilden customers be accorded the protection on project cost overruns included in the April 20, 2017 amended version of MCL 460.6s(9).
2. The Commission include in its order approving the CON application a financing condition that UMERC will finance the debt portion of the capital cost for the new power plants at the lowest cost rate among the following financing options based on indicative pricing from financial institutions solicited for the transaction:

- a. UMERC standalone debt;
 - b. UMERC with WEC guarantee;
 - c. WEC standalone debt.
- 3. The allocation of costs, revenues, and other matters for the following:
 - a. All proceeds from the sale of any excess capacity from the two generating plants will be credited 100% to the benefit of non-Tilden customers.
 - b. The proceeds from the sale or value of any ancillary services from the two generating plants will be credited 100% to the benefit of non-Tilden customers.
 - c. The proceeds from the sale of any excess energy generation above Tilden's requirements from the two generating plants will be credited 100% to the benefit of non-Tilden customers.
 - d. [BEGIN CONFIDENTIAL] *** [END CONFIDENTIAL].
 - e. Base rates charged to non-Tilden customers will be designed to recover all property taxes for the RICE electric generation facilities.
 - f. Base rates charged to non-Tilden customers will be designed to recover generation A&G expenses of the RICE electric generation facilities less the annual amount paid by Tilden, as adjusted, in accordance with the A&G Expense definition in Section 1.1 of the Special Contract.
 - g. Base rates charged to non-Tilden customers will be designed to recover 50% of RICE electric generation facilities capital costs (i) applicable to Tilden's Non-Firm Planning Load level and (ii) future plant capital investment during the Special Contract Term.
 - h. UMERC will submit a fuel and/or energy cost hedging program with its first PSCR plan filed for 2021.
 - i. UMERC will not enter into a SSR agreement with MISO for the RICE electric generation facilities for a period of 20 years commencing on the first date of the Delivery Period as defined in the Special Contract.
- 4. In its order approving the CON application, the Commission should include conditions regarding the specific identification of costs and revenues related to Tilden and non-Tilden customers in the PSCR reconciliation of power supply costs.
- 5. The Commission should direct UMERC and SEMCO to adjust their project timeline and enter into serious negotiations to achieve a compromise solution that will maximize the utilization of transportation capacity on the Marquette Connector

Pipeline (MCP) and minimize or eliminate the need for compression facilities to be built by NNG. Alternatively, if the Commission finds such a directive is unworkable, it should encourage UMEREC to consider contracting for capacity on the MCP in the future if it requires additional gas pipeline capacity to supply the two power plants and the MCP is a cost-effective option.

6. In its conditional approval of the CON application, the Commission should direct the company to take all necessary procedural and legal actions before MISO to avoid the results of additional transmission upgrades under the Optional Study D if they are included in MISO's DPP report. The Commission should also direct UMEREC to elicit the assistance of other stakeholders and parties to this CON proceeding to assist the company in disputing the necessity of the transmission upgrades outlined in Option D before MISO.

4 Tr 538-539, 547-548.

UMERC agreed with the Attorney General's conditions and recommendations, with the exception of condition five. However, UMEREC stated that it would accept the Attorney General's alternative recommendation in condition five.

The Attorney General stated that he reviewed the Special Contract and noted that UMEREC requested that the Commission approve its proposal to: (1) include all power supply costs for the RICE electric generation units in its PSCR calculation, including the costs associated with serving Tilden's load; and (2) credit the monthly revenues billed by UMEREC to Tilden for energy and transmission to the total UMEREC PSCR costs, with the remaining amount of power supply costs (including electric transmission and natural gas pipeline costs) collected from non-Tilden customers via the PSCR mechanism. 3 Tr 92. In addition, the Attorney General noted that UMEREC agreed to include a reconciliation of Tilden-billed costs and revenue within its annual PSCR reconciliation. *Id.*, p. 104. The Attorney General supported the company's proposal, and recommended that the Commission approve the company's PSCR recommendations.

Because UMERC and the Attorney General agreed upon a resolution of the Attorney General's issues, there are no remaining issues between UMERC and the Attorney General in this case.

C. Citizens Against Rate Excess

CARE stated that it agrees with the Staff that UMERC should not be granted rate relief in this case because the company did not present the requisite COSS. However, CARE disagreed with the Staff that, in the future, UMERC will be able to comply with requirements in the March 23 order. CARE argued that the Staff's conclusion is premature, UMERC must provide clear, convincing, and unequivocal evidence that one of the two standards are met, and the Staff failed to evaluate the Special Contract, consistent with the March 23 order, with the assumption that UMERC's shareholders would absorb any revenue shortfall that results from its provisions. 4 Tr 652-654.

In response to the Attorney General's concerns that non-Tilden customers will be responsible for costs properly allocated to Tilden, CARE recommended that the Commission require UMERC to maintain separate accounting of Tilden and non-Tilden power supply costs and transmission costs. CARE argued that this would allow the Staff and intervenors in a PSCR reconciliation to determine whether Tilden's power transactions negatively impacted non-Tilden customers. 4 Tr 654.

In its brief, for the first time, CARE asserted that the Commission lacks authority to: (1) approve the Special Contract in a CON proceeding; (2) allocate the costs of the UP Generation Project between UMERC's non-Tilden customers and Tilden; and (3) allocate PSCR costs in a CON proceeding and outside a PSCR case.

D. Cloverland Electric Co-operative

In its brief, Cloverland provided several reasons why it believes that UMERC's application and testimony do not adequately address questions regarding the impact on safe, reliable, and adequate UP energy service. First, Cloverland asserted that the UP Generation Project may result in MISO assessing Cloverland additional revenue sufficiency guarantee (RSG) voltage and local reliability (VLR) payments. Cloverland contended that if MISO is required to manage congestion on the system, it will dispatch PIPP and any difference between the production cost and locational marginal price (LMP) will be charged proportionally to the entire UP load, which will increase costs to Cloverland. Cloverland's initial brief, p. 6. Cloverland stated that it will not object to the Commission's approval of the UP Generation Project so long as Cloverland is held harmless from the cost risks associated with the UP Generation Project. *Id.*, p. 7.

Second, Cloverland argued that UMERC's IRP is inadequate. According to Cloverland, the company's IRP failed to consider alternative energy solutions that would be more beneficial and efficient. *Id.* Cloverland also claimed that UMERC's IRP is superficial and does not comprehensively address the IRP requirements under MCL 460.6s(11).

Finally, Cloverland argued that the Commission should apply the Act 341 amendments to UMERC's application. The Commission notes that this issue was discussed in section III *supra*.

E. Environmental Law and Policy Center

ELPC argued that UMERC's IRP is deficient and that the company's flawed analysis leads to a sub-optimal consideration of least-costs and environmental benefits. In ELPC's opinion, UMERC should have utilized different combinations of multiple technologies and assets rather than a single technology approach to address the entire 183 MW of identified need. ELPC's initial brief, pp. 8-12. ELPC asserted that modular technologies such as EO, solar PV, and battery

storage could be used to displace one or more of the natural gas-fired RICE units in the UP Generation Project. *Id.*, pp. 9-11.

According to ELPC, UMERCE's IRP failed to consider EO and failed to follow IRP best practices or procedures as set forth in Exhibit ELP-2. For example, ELPC stated, UMERCE's IRP analysis forces EO to provide for the full load requirement of 183 MW. ELPC argued that UMERCE should have provided a cost curve for the marginal cost of EO at a given energy savings level and then allowed EO to compete against the UP Generation Project units and other generation technologies. 4 Tr 630. ELPC stated that this is a fairly standard practice in the IRP process that is designed to identify the most economical resource to serve the next increment of capacity need. *Id.*

ELPC asserted that the weighted average cost of EO is \$13.55 per MWh according to the 2016 report on the implementation of 2008 PA 295 EO programs. *See*, Exhibit ELP-5. Because the \$13.55/MWh rate reported is below the \$73.78/MWh leveled cost of energy for the UP Generation Project, ELPC believes that some level of EO in UMERCE's UP Generation Project proposal could provide a lower cost solution. 4 Tr 630. In addition, ELPC argued that if UMERCE utilized EO to displace energy produced by the UP Generation Project, it would reduce CO₂, other pollutant combustion gas emissions, and provide positive environmental impacts related to natural gas production and transportation. *Id.*, p. 631.

ELPC also argued that RE should have been treated as an incremental resource – not a single solution. According to ELPC, renewable resources, such as solar, have many benefits:

[S]olar plant sizes are very flexible given the modular nature and fine size of the panels that make up solar facilities. Depending on size and efficiency, a single solar panel produces just 300 Watts of energy at a given time and so can be configured into just about any size to fit any location. Locational flexibility provides the opportunity to place units closer to load starved areas and help support local resource deficiencies should they exist.

4 Tr 631. ELPC cited Exhibit ELP-4, stating that the weighted average renewable cost in the state of Michigan was \$76.55/MWh, which ELPC believes is comparable to UMER's RICE electric generation project costs.

In addition, ELPC stated that UMER's IRP failed to consider battery storage. ELPC asserted that battery storage: (1) is highly flexible; (2) could allow the UP Generation Project units to run at a higher capacity factor than 55%, storing the excess energy when not needed and dispatching when load is high; (3) would allow fewer UP Generation Project RICE units operating at a higher and more efficient capacity factor; and (4) offers a fast frequency response well outside the ability of any of the other supply options considered. 4 Tr 632.

In regards to the Special Contract, ELPC argued that the agreement in the ARSA to use RICE generation technology resulted in a predetermined IRP. Therefore, ELPC asserted, the IRP is flawed because it determined that the RICE electric generation facilities were preferable before the IRP process was completed.

ELPC stated that UMER's analysis did not allow for any optimization of resource combinations and did not utilize more standard industry tools for IRP analysis, such as Strategist, Aurora, or PLEXOS. ELPC also contended that UMER's IRP failed to consider a combination of the asset solutions including EO, solar PV, and battery storage, and failed to follow the best practices principle that an IRP should be developed using software or a combination of software specifically designed for the IRP process. ELPC recommended that UMER complete a new IRP that involves external stakeholders, includes innovative resource portfolio combinations and uses, and incorporates competitive bidding.

F. Fibrek Inc.

Fibrek recommended that the Commission not approve the Special Contract until UMERC complies with the March 23 order. Fibrek stated that, pursuant to the procedures in the March 23 order, UMERC must submit a COSS to ensure that Fibrek is being charged rates that relate directly to “the cost of providing service” to its customer class. Fibrek’s initial brief, p. 6.

If the Commission decides to approve the Special Contract without requiring UMERC to produce a COSS, Fibrek argued that the Commission must ensure that any costs associated with the UP Generation Project not fully recovered by UMERC will not be shifted to Fibrek and other non-Tilden customers through increased rates. *Id.*, pp. 7-8. Fibrek asserted that, “When a utility seeks to enter into special contracts and reallocate contract costs, that utility should expect to ‘assume full responsibility for negotiating the discounted prices’ *and should expect ‘that its shareholders [will] absorb much, if not all, of any revenue shortfall caused by the pricing and other contract provisions that the utility negotiates.’*” *Id.*, quoting the March 23 order, p. 21 (emphasis added).

Fibrek also noted that pursuant to MCL 460.11(1), the Commission “shall ensure that the establishment of electric rates is equal to the cost of providing service to each customer class.” Agreeing with the Attorney General, Fibrek recommended that the Commission require UMERC to maintain separate records of power supply and transmission costs for Tilden and non-Tilden customers to ensure that non-Tilden customers are not responsible for costs properly belonging to Tilden. Fibrek’s initial brief, pp. 5-6.

G. GlidePath Development LLC

GlidePath asserted that it has been developing distributed generation projects in the UP over the last several years. According to GlidePath, its projects: (1) represent a more efficient and

cost-effective way to meet all, or a portion of, the UP energy, reliability, and RE needs; (2) have site control; (3) have been discussed with permitting agencies; (4) have already proceeded through various stages of the distribution interconnection process; (5) represent a portfolio of distribution-connected RICE and solar PV facilities that can each be configured into community micro-grid configurations that include battery storage; and (6) are capable of coming online in stages as early as the end of 2018. 4 Tr 641. GlidePath contended that UMERG failed to comply with Section 6s(11) of Act 286 because it did not properly model and analyze resource options in its IRP, and argued that the ARSA may not be used as a replacement for the Section 6s requirements.

GlidePath claimed that its UP projects are more reasonable and prudent than those proposed by UMERG because they have the following advantages:

1. Project sizes represent a matching with local load and therefore does not cause overloads or create the need for additional transmission upgrades.
2. Project interconnections into the distribution system do not require a high voltage generator step-up transformer.
3. Project sizes for the GlidePath RICE projects represent a more reasonable load on the natural gas system and do not require major gas upgrades.
4. The GlidePath RICE projects are sited closer to the natural gas infrastructure and do not require major laterals.
5. Each of the previous points result in the fact that GlidePath can deliver the projects at lower costs than the proposed UP Generation Project.
6. Additionally, since the GlidePath Projects are on the distribution side of the grid, they will aid in unloading of the transmission system in the UP, reducing system losses, and contributing to a stronger system voltage. System voltage stability is a key concern that the UP faces with the retirement of PIPP.

4 Tr 642. GlidePath contended that its projects, combined with a reduced version of UMERG's proposal, would be the most reasonable and prudent means of meeting the UP's power needs.

GlidePath asserted that UMEREC failed to solicit alternatives to the UP Generation Project because the company never issued a request for proposal (RFP) for the 183 MW need. GlidePath argued that it provided a more practical and cost-effective alternative proposal. According to GlidePath, it is planning to file an Exempt Wholesale Generators application with the FERC and/or as a Qualifying Facility. If these applications are approved, GlidePath claimed that it may sell energy and capacity at wholesale prices to the UP mines, other eligible UP customers, or to electric utilities. 4 Tr 644.

GlidePath averred that its projects should be used to serve part of the 183 MW need identified in UMEREC's IRP because GlidePath's projects could be located closer to UMEREC's customers and could provide distributed generation. GlidePath argued that its UP distributed generation projects are more cost-effective than other alternatives and would provide enhanced reliability over centralized transmission-connected generation. *See*, 4 Tr 645. For example, GlidePath stated that the Baraga Township site has an overload issue that may require a \$100 million transmission upgrade. GlidePath explained that its distributed generation projects would avoid transmission upgrades, are sized to match nearby load, have a positive local impact, provide voltage strength at the ends of the existing weak transmission system, and improve the system's stability. *Id.*

H. Michigan Technological University

MTU took no position regarding UMEREC's request for CONs and CPCNs, and no position on UMEREC's request for Commission approval of the Special Contract or accounting authorizations. However, MTU requested that, if the Commission approves UMEREC's CON requests, the Commission condition the approval upon a UMEREC commitment that it will ensure that there is an adequate supply of natural gas available to all customers relying on the NNG pipeline. MTU's initial brief, p. 5.

MTU noted that UMEREC, the Staff, and the Attorney General admitted that, currently, there is not enough firm natural gas pipeline transportation capacity from NNG to serve UMEREC's UP Generation Project. MTU expressed concern that UMEREC's proposed Precedent Agreement with NNG to increase natural gas pipeline transportation capacity may not allow sufficient transportation capacity. *Id.*, p. 7. Therefore, MTU requested that the Commission should require UMEREC to construct a new natural gas compressor, new laterals to deliver gas to the Baraga Township and Negaunee Township sites, two TBSs, and to purchase 100% firm capacity for the two sites, to ensure that adequate natural gas supply is available to all customers relying on the NNG pipeline.

I. Tilden Mining Company L.C.

Tilden supported UMEREC's application and requests for other relief. Tilden asserted that ELPC's and GlidePath's arguments regarding the adequacy of UMEREC's IRP, CARE's and Fibrek's arguments regarding the Commission's authority to approve the Special Contract, and UPPCo's argument that the UP Generation Project will increase RSG charges are all without merit.

Tilden argued that "the evidence shows that UMEREC demonstrated the need for the power from the proposed RICE generating units. Locating units at the Baraga site avoids approximately \$100 million in costs to upgrade the Lakota-Winona transmission line needed to ensure system reliability in the area." Tilden's reply brief, p. 7. Tilden stated that MISO's operating guidelines that were adopted in order to permit the termination of the White Pine SSR agreement are temporary. And, Tilden argued, MISO's operating guidelines are not a permanent solution to resolve the reliability issues in the UP that gave rise to the White Pine SSR agreement – a permanent solution to the reliability issues in the region is still needed. *Id.*

In response to MTU, Tilden stated that there is no evidence that UMEREC's UP Generation Project will reduce availability of NNG gas to other customers. Tilden asserted that UMEREC is not the supplier of natural gas to MTU, cannot guarantee the availability of natural gas, and does not have an obligation to do so. Tilden argued that the Commission has no authority to regulate capacity on the NNG pipeline, and it would be unreasonable for the Commission to include a condition in its order requiring UMEREC to assure adequate capacity for all customers relying on the NNG pipeline. Tilden's reply brief, pp. 8-9.

Tilden asserted that UMEREC has established that the UP Generation Project is in the best interest of UP customers and would provide safe, reliable, and adequate electric service. According to Tilden, the planned retirement of PIPP, without any replacement generation, would leave insufficient resources to provide UP customers, including Cloverland's customers, with reliable, adequate power. *Id.*, pp. 9-10.

J. Upper Peninsula Power Company

In UPPhCo's opinion, UMEREC's proposal to install the RICE units at two separate sites is based on a flawed analysis and assumptions. UPPhCo argued that UMEREC incorrectly assumes that construction of the Baraga Township facility will result in the cancelation of the MTEP 8089 transmission project to upgrade the Lakota-Winona line. UPPhCo also contended that UMEREC's two-site generation proposal will result in additional annual MISO RSG costs to UPPhCo and its customers.

UPPhCo stated it and its customers will incur higher costs as a result of building generation at both the Baraga Township and Negaunee Township sites, and that in comparison, a single-site installation at the Negaunee Township site would result in the lowest total cost of generation on a dollars per MWh basis. 4 Tr 674-675; Exhibits UPP-1 and UPP-2. UPPhCo explained that after

removing the \$100 million transmission upgrade cost, the total cost of generation for Option 1A, which includes all 10 units at the Negaunee facility, would be reduced to \$70.50/MWh. As a result, UPPCo stated, the cost is approximately \$12/MWh lower than HDR's original cost estimate for Option 1 of \$82.09/MWh, and \$3/MWh lower than the cost of Option 1B of UMERCo's two-site proposal. *See*, Exhibit UPP-1.

UPPCo asserted that there is no evidence that suggests that the Lakota-Winona upgrade, as originally proposed, is necessary. UPPCo noted that the Lakota-Winona upgrade was proposed by ATC as an alternative to the White Pine SSR. However, UPPCo stated that in July 2016, ATC proposed a transmission reconfiguration plan for outages, which would eliminate the reliability issues. UPPCo stated that the transmission reconfiguration would also permit the retirement of White Pine Unit No. 1, which in turn eliminates the need for the Lakota-Winona transmission project. UPPCo argued that the Lakota-Winona transmission project is no longer necessary because of ATC's transmission reconfiguration plan, and not because of UMERCo's proposed Baraga Township RICE electric generation project. 4 Tr 677. Therefore, UPPCo contended that the Commission should not include the estimated \$100 million Lakota-Winona project system-wide cost in the total cost of generation.

UPPCo calculated that the total cost impact to UMERCo's customers for the Lakota-Winona transmission project is \$554,397 on a NPV basis over 30 years. In comparison, UPPCo stated that there is a \$26 million cost difference between the two-site option and the single-site option as shown on the Total Project Cost line in Table 1.0-1: Options Comparison on page 4 of HDR's Northern Michigan Power Generation Technology Comparison, Exhibit A-24. UPPCo opined that it would not be reasonable and prudent to allow UMERCo to incur \$26 million in project costs to save \$554,397 related to an uncertain Lakota-Winona transmission project. 4 Tr 678-679.

Furthermore, UPPCo estimated that it will incur an additional \$200,000 annually in RSG charges as a result of UMERCo's two-site proposal. *See*, Exhibit UPP-3. UPPCo explained that RSG is a MISO mechanism to ensure generation resources are committed to cover shortfalls in real-time generation output from day-ahead schedules and to manage transmission constraints or VLR issues. 4 Tr 679. UPPCo stated that RSG charges recover production costs when the production costs exceed the LMP. According to UPPCo, if MISO needs to manage congestion, it will dispatch PIPP; because PIPP is located in an area that benefits the entire UP, any difference between PIPP production costs and LMP is charged proportionally to the entire UP load. UPPCo argued that if the Baraga Township facility is built and those units are dispatched, the load requiring the reliability dispatch will likely be charged to the load pocket closest to the Baraga Township facility in the western UP. As a result, UPPCo believes that it will be charged a larger share of the costs associated with the reliability dispatch than it would if those same UMERCo units were located at the Negaunee Township site. *Id.*, pp. 679-680.

K. Upper Michigan Energy Resources Corporation

In its rebuttal testimony, initial and reply briefs, UMERCo responded to the various arguments set forth by the parties.

1. The Commission Staff

UMERCo disagreed with the Staff that the Commission should delay granting the company's requested cost recovery relief until UMERCo submits a COSS in a future rate case. According to UMERCo, the March 23 order "provides that an allocation between the special contract customers and non-special contract customers can be justified by a demonstration of either: '(1) that the contract prices and terms are justified on the basis of the cost of service, or (2) that the benefits for other (non-participating) ratepayers are substantial and have a value that outweighs the costs that

are not recovered from contract customers.’” UMERC’s reply brief, p. 2, quoting the March 23 order, p. 21. UMERC stated that the March 23 order discussed a COSS as a means to meet the order’s second option, however nothing in the order foreclosed the use of other means to satisfy its policy objectives. In UMERC’s opinion, if a traditional COSS were the only means of meeting the second option, there would appear to be no meaningful distinction between the options. UMERC argued that if the Special Contract contains a discount, which has not been established, then the company has satisfied the second option of the March 23 order through its IRP and testimony.

UMERC contended that the Staff’s preference for a COSS is based on its view that the cost savings determinations in the company’s IRP are “projections of what *may* occur.” *Id.*, quoting the Staff’s initial brief, p. 42 (emphasis in the original). However, according to UMERC, this rationale does not support the Staff’s position because any COSS reflects projections. In any event, UMERC stated, its IRP cost analysis better addresses the March 23 order’s second option because it reviewed a 30-year period and found substantial cost savings throughout the period. UMERC opined that a COSS that further breaks down costs among other customer classes does not serve any purpose at this time.

2. Citizens Against Rate Excess and Fibrek Inc.

UMERC addressed CARE’s claims *ad seriatim*, some of which were repeated by Fibrek. Responding to CARE’s allegation that the Commission has no legal authority to approve the Special Contract in a CON proceeding, UMERC stated that this claim is based on a misconstruction of the applicable statutes and Commission rules, ignores the Commission’s inherent power as an administrative agency to reasonably control its own docket, is contrary to Commission practice, impractical and unreasonable, and raised too late in this proceeding.

UMERC argued that the plain language of Rule 31 only requires the company to file an application for approval of the Special Contract, which UMEREC asserted that it did in Section IV of its application. Contrary to CARE's claim that approval of a special contract must be done separate from a CON proceeding, UMEREC stated that "when the Legislature contemplates a separate proceeding, it clearly so states." UMEREC's reply brief, p. 5.

In addition, UMEREC contended, the Commission has reasonable control, subject to constitutional and statutory provisions, over the processing of applications and other matters before it. UMEREC opined that splitting related requests arising out of the same overall transaction into separate proceedings would not assist, but would seriously hinder, the securing of a just, economical, and expeditious determination of the issues arising out of the transactions at issue.

UMERC noted that CARE's construction of Rule 31 is contrary to Commission practice. According to UMEREC, the Commission has repeatedly considered a request for approval of a special contract in conjunction with other related requests. For example, UMEREC stated that in the January 26, 1996 order in Case No. U-10957, WEPCo requested a CPCN and approval of a special contract in connection with the rendering of electric service to White Pine Mine in Ontonagon County. UMEREC stated that, in that case, the Commission granted both WEPCo's request for a CPCN and approved the special contract between WEPCo and Copper Range Company. In addition, UMEREC argued, there is no language in Section 6s of Act 286 that expressly prohibits, or can be reasonably read as prohibiting, the Commission from considering other related requests for relief in a CON proceeding.

UMERC noted that CARE presented the special contract issue for the first time in its brief, and, in UMEREC opinion, it is clearly untimely. UMEREC argued that any objections should have raised and addressed at the prehearing conference, before discovery was pursued, Staff and

intervenor testimony and exhibits were prepared and filed, rebuttal was filed, and witnesses were cross-examined. UMERC asserted that CARE raised this issue too late in the proceedings and, therefore, waived its right to raise the issue.

Next, UMERC addressed CARE's claim that no authority exists to allocate the company's costs to construct, own, and operate a generation facility among a special contract customer and other customers in a CON case. Because there is no evidence that non-Tilden customers will subsidize Tilden under the Special Contract, UMERC argued that Section 6s of Act 286 permits the company to request, and provides the Commission authority to grant, UMERC's cost recovery relief in this case. And, UMERC stated that prior Commission orders permit the requested cost recovery relief. UMERC's reply brief, pp. 9-13. UMERC noted that, similar to the Staff, CARE and Fibrek recommend that the Commission should deny UMERC's cost recovery relief based on the March 23 order. UMERC reiterated the response provided to the Staff.

In response to CARE's argument that the Commission can only approve relief connected with PSCR in a general rate case or a PSCR case, UMERC stated that with the exception of firm natural gas costs, the company is not requesting that the Commission approve any PSCR costs in this proceeding, nor does UMERC seek to require non-Tilden customers to pay any of Tilden's PSCR costs. *Id.*, p. 14. UMERC explained that it is only requesting approval of its proposed reporting of its PSCR costs in PSCR proceedings. And, with respect to UMERC's requests for approval of annual firm natural gas costs as PSCR costs, the company asserted that nothing in MCL 460.6j states that such costs may only be approved in a rate case or PSCR proceedings.

UMERC also noted that CARE's claims regarding the sufficiency of the company's IRP echo ELPC's contentions and are without merit for the same reasons set forth below in response to ELPC.

3. Cloverland Electric Co-operative

UMERC disputed Cloverland's claim that there is scant evidence that the UP Generation Project will provide safe, reliable, and adequate service. UMERB responded that the company's IRP and testimony provide sufficient evidence that the UP Generation Project will provide the needed energy and will enhance reliability in the UP. UMERB's reply brief, p. 34.

Regarding the VLR/RSG payments with which Cloverland is concerned, UMERB contended that Cloverland is paying those costs currently, and after PIPP is retired and replaced by the UP Generation Project, RSG payments made by other utilities are expected to decrease by 75% from current levels.

In addition, UMERB disagreed with Cloverland that transmission is an alternative to the UP Generation Project. UMERB asserted that transmission is an inferior alternative to the UP Generation Project because it is significantly more expensive and cannot lower emissions. UMERB's initial brief, pp. 45-46.

4. Environmental Law and Policy Center

As an initial matter, UMERB reviewed the unique load characteristics of the UP, the history of the negotiations and the agreement to develop a new, clean generation plant in the UP, the ARSA, the Special Contract, and the decision to retire PIPP. UMERB quoted page 30 of the Staff's initial brief, which states that:

Given the unique circumstances that led to this case, UMERB's IRP should not set the standard for IRP's in future CON cases. Outside of the Upper Peninsula, UMERB's IRP in this case should have no precedential value.

UMERB stated that it fully agrees with the Staff.

In response to ELPC's contention that the company's IRP should have proposed to use RE and/or storage to displace a portion of the RICE electric generation facilities, UMERB argued that

ELPC ignores the uniqueness of the company's service territory. UMERC stated that it has a single customer – the mines – that represents approximately 70% of the utility's load. UMERC explained that the UP is a load pocket that has very specific needs, such as operating redundancy, a very large, high load factor customer, and frequent use of dispatchable generation to solve reliability problems. UMERC's reply brief, p. 19. UMERC claimed that, consistent with Section 6s(11)(f) of Act 286, its IRP clearly analyzed the "availability and costs" of RE and battery storage as alternatives to the UP Generation Project, but found that partially intermittent RE or highly-limited storage will not meet UMERC's capacity requirements.

Regarding ELPC's argument that UMERC's IRP forced EO to provide for the full load requirement, the company stated that the claim is unfounded. UMERC quoted pages 6-7 of its IRP, which state that EO "will continue to be provided by Efficiency United in the UMERC service territory and similar continued energy savings are expected. The load forecasts in this IRP include the energy savings from the on-going EO/waste reduction plans." Exhibit A-19, pp. 6-7. In other words, UMERC asserted that EO was assumed to be a factor on an on-going basis in the company's load forecasts when determining the need for 183 MW of new generation to replace PIPP.

In response to ELPC's claim that UMERC should have used a modeling program other than PROMOD for the IRP, the company argued that PROMOD is widely used by other companies. Additionally, UMERC stated that other general purpose IRP tools have serious drawbacks when applied to UMERC and the UP because they do not capture the workings of the MISO energy market. UMERC's reply brief, p. 25. UMERC contended that ELPC did not demonstrate where PROMOD failed to meet any requirements under Section 6s of Act 286 or the Filing Requirements.

5. GlidePath Development LLC

UMERC disputed GlidePath's claim that the company failed to properly model and analyze any real supply-side resource options in its IRP. According to UMER, the HDR Report evaluated six different generation options, and the IRP clearly shows that the company considered a full range of supply options, including the unique situation in the UP. UMER's reply brief, p. 37.

In response to GlidePath's allegation that UMER failed to actively solicit alternative proposals and failed to acknowledge or analyze GlidePath's proposed PPA, the company argued that Section 6s(3)(d) of Act 286 "clearly permits UMER's CON to be based on 'estimated purchase or capital costs,' as does § 6d(4)(c) . . . and does not require the utility to issue RFPs." UMER's reply brief, p. 37.

Additionally, UMER noted that the ARSA was signed on August 12, 2016, and it specified that the company would use RICE technology for the new generation. UMER stated that the earliest that GlidePath says that it sought to communicate a high-level proposal to UMER was October 5, 2016, after the company had agreed to construct RICE electric generation facilities. UMER also noted that GlidePath participated in a discussion for a long-term generation solution with Tilden between September 5, 2014, and December 11, 2014, but those discussions did not result in an agreement with Tilden or produce a solution to the UP's energy needs. UMER's initial brief, p. 50. Therefore, UMER stated, GlidePath's contention that the company's IRP is deficient because it does not contain a GlidePath PPA is without merit.

6. Michigan Technological University

Regarding MTU's request that the Commission condition approval of the order upon the company's assurance that there is adequate supply of natural gas available to all customers relying

on the NNG pipeline, UMEREC responded that MTU's condition is unfounded and is a request for relief outside of UMEREC's control. UMEREC's reply brief, p. 39.

7. Upper Peninsula Power Company

UMEREC noted that according to UPPCo, the Lakota-Winona transmission upgrade was proposed by ATC as an alternative to the White Pine SSR, the need for which was eliminated by a transmission reconfiguration. UMEREC argued that if the need for this project was eliminated, it would have been removed from the current MTEP17, Appendix B. However, UMEREC averred that it has not been removed. 3 Tr 339. Therefore, according to UMEREC, the UP Generation Project *will* eliminate the \$100 million in costs associated with the Lakota-Winona transmission upgrade, and the project is not "phantom savings" as asserted by UPPCo. UMEREC's reply brief, p. 29, quoting UPPCo's initial brief, p. 1 (emphasis added).

In response to UPPCo's claim that the total cost impact of the Lakota-Winona transmission project to UMEREC customers would be \$703,028 on an NPV basis, compared to the \$26 million cost difference between the two-site and the single-site option, UMEREC argued that UPPCo's analysis contained numerous flaws, including: (1) UPPCo mixed Tilden and non-Tilden costs and failed to note that half, or \$13 million of the \$26 million, will be paid by Tilden as part of the Special Contract; (2) UPPCo's analysis did not account for the fact that having two sites improves the reliability of the overall project by adding redundancy in the common plant system; (3) UPPCo's Exhibit UPP-2 double-counted the \$100 million Lakota-Winona cost and did not count the transmission interconnection costs; (4) UPPCo's Exhibit UPP-2 erroneously reflects the projected cost of the Plains-National project as \$373 million when the cost is actually \$273 million; and (5) UPPCo did not account for an allowance for \$73 million in interconnection costs that will be shared across all ATC customers. UMEREC's reply brief, pp. 30-31, citing

3 Tr 250. UMERC identified similar errors in UPPCo's conclusion that the Baraga Township site will increase RSG charges to UPPCo and increase UPPCo's energy and capacity costs.

VII. PROPOSAL FOR DECISION

A. Certificate of Necessity Filing Requirements and Instructions

The ALJ completed a thorough review of UMERC's application and responses to the Filing Requirements on pages 85-102 of the PFD, which is mirrored in sections II and IV above and will not be repeated here. The ALJ found that there was a preponderance of the evidence that UMERC's application meets the Filing Requirements for CON and CPCN applications. PFD, p. 103.

B. Certificate of Necessity

1. Section 6s(4)(a)

The ALJ determined that UMERC demonstrated through its witness testimony and IRP that the company needs the power that would be supplied by the UP Generation Project's RICE electric generation facilities. PFD, p. 104. The ALJ stated that there was no evidence presented that UMERC does not need the 183 MW in capacity, and therefore, he found that there was a preponderance of the evidence that UMERC complied with Section 6s(4)(a). *Id.*

2. Section 6s(4)(b)

The ALJ noted that according to UMERC, the UP Generation Project will require a Permit to Install from DEQ and a Title V Renewable Operating Permit from DEQ after the facilities are built. PFD, p. 105, citing 3 Tr 420-421. In addition, the ALJ noted, UMERC claimed that the UP Generation Project facilities will be subject to the federal New Source Performance Standards, the National Emission Standards for Hazardous Air Pollutants for Stationary RICE, federal or state

wetlands permits, and federal or state permits if the two sites would impact listed endangered or threatened species. *Id.*, pp. 106-107, citing 3 Tr 428-433.

The ALJ found that UMERB provided testimony regarding the water and sewer infrastructure required for construction and operation not located on the proposed site, but required for plant construction and operation. Additionally, the ALJ stated, the Staff confirmed that the UP Generation Project complies with all applicable state and federal environmental standards, laws, and rules. *Id.*, p. 108, citing 3 Tr 364; 4 Tr 292; Exhibits S-2.1, S-2.2, and S-2.3. The ALJ also determined that, pursuant to the Commission's CPCN application instructions, UMERB provided a description of all major state, federal, and local permits required to construct and operate the proposed generation facility in compliance with state and federal environmental standards, laws, and rules. *Id.*, p. 109.

The ALJ stated that no party submitted any evidence that the UP Generation Project will not comply with all applicable state and federal environmental standards, laws, and rules. The ALJ noted that UMERB's and the Staff's testimony on this issue was un rebutted. Therefore, the ALJ found that the preponderance of the evidence shows that UMERB complied with the requirements of Section 6s(4)(b).

3. Section 6s(4)(c)

The ALJ noted that UMERB estimated that its total UP Generation Project cost, with AFUDC, would be \$277,200,000 for 183 MW of capacity, installed at two separate sites. According to UMERB, the ALJ stated, the company's IRP demonstrates that the UP Generation Project would provide substantial savings to UMERB's non-Tilden customers, as set forth in Exhibit A-19, pages 3 and 15. After providing a review of Exhibit A-19 and page 224 of volume 3 of the transcript, the ALJ found that UMERB compared post-UP Generation Project non-Tilden customer service costs

to BAU costs. He determined that the UP Generation Project provides a lower NPV of \$161 million over a 30-year period for non-Tilden customers as compared to BAU. In addition, the ALJ noted that, for the first full year of UP Generation Project service, UMERC forecasted savings of \$1.8 million, or 3.3% of the power supply costs (not including transmission) in BAU. PFD, p. 111. The ALJ stated that the annual savings for non-Tilden customers increase over time as the revenue requirement of the RICE units is generally flat over this time period as the plant-in-service depreciates. *See*, 3 Tr 325.

The ALJ found that UMERC's analysis also included transmission costs. He stated that, according to UMERC, the incremental savings to the non-Tilden UMERC customers is the avoided transmission infrastructure costs of \$373 million, less the UP Generation Project transmission interconnection costs. PFD, p. 115. The ALJ noted that a net avoided transmission investment of \$300 million was used.

Finally, the ALJ provided a review of pages 242-244 of volume 3 of the transcript, in which UMERC stated that the UP Generation Project cost of energy would be significantly lower than the PIPP cost of energy. The ALJ found that the IRP's uncertainty and sensitivity analysis included higher gas prices and CO₂ emission limits from the Clean Power Plan, and that the sensitivity analysis showed that the UP Generation Project would still be \$118 million lower in NPV costs than BAU. PFD, pp. 115-116, citing 3 Tr 244 and Exhibit A-19, p. 15.

On page 116 of the PFD, the ALJ found that:

the preponderance of the evidence shows that the estimated cost from the UP Gen Project RICE electric generation facilities is reasonable. Staff's witnesses concluded that UMERC had satisfied §6s(4)(c). UMERC's cost estimates and projected cost savings to non-Tilden customers over the 30 [year] study period were not rebutted by any evidence. Therefore, I find that UMERC has satisfied the requirements of §6s(4)(c).

4. Section 6s(4)(d)

The ALJ found that, in Exhibit A-24, UMEREC provided an engineering study by HDR, which concluded that UMEREC's UP Generation Project two-site RICE generation facilities would provide the lowest evaluated cost of generation for 140 MW at an N-2 redundancy and would avoid \$100 million in electric transmission upgrades. PFD, pp. 116-118; *see also*, 3 Tr 200-202.

The ALJ also noted that UMEREC and the Staff provided testimony and exhibits showing that demand reduction, load management, EO, and RE are not viable alternatives to the UP Generation Project. PFD, pp. 119-120. Therefore, the ALJ found that, based on the results of the IRP and UMEREC's testimony, there is a preponderance of the evidence that the UP Generation Project is the least costly option.

5. Section 6s(4)(e)

The ALJ stated that UMEREC anticipates that 60% to 80% of the construction workforce will be drawn from local unions and residents of Michigan. The ALJ found that no party provided any direct or rebuttal evidence, and therefore, he determined that UMEREC complied with Section 6s(4)(e). *Id.*, p. 120.

6. Section 6s(7)

The ALJ found that in its brief, UMEREC agreed to provide progress reports to the Commission as described by the Staff. PFD, p. 121.

7. Sections 6s(6) and (9)

The ALJ stated that Section 6s(6) requires the Commission to specify the costs approved for the construction of the electric generation facility. After a review of the testimony, the ALJ noted that UMEREC provided a breakdown of the expected project costs and a project total, including

AFUDC, of \$277,200,000. PFD, p. 122. The ALJ found that UMEREC agreed to update its cost estimate pursuant to Section 6s(4)(c).

In addition, the ALJ noted that in Section 6s(9), the Commission shall include in an electric utility's retail rates all reasonable and prudent costs for an electric generation facility, once the electric generation facility is considered used and useful. The ALJ found that UMEREC included a \$26,500,000 project contingency in the estimated project cost, and the Staff supported the contingency. However, the ALJ stated, the Staff recommended that the project costs not be included in rates until UMEREC files a rate case which includes a request to include such costs in rates. *Id.*

Finally, the ALJ noted that Exhibit S-1.4 contains a description of UMEREC's competitive bid process, which includes a construction schedule and a commercial operation date of mid-year 2019.

8. Section 6s(11)

The ALJ completed a thorough review of UMEREC's IRP on pages 123-133 of the PFD, which is embodied in section V above and will not be repeated here. The ALJ agreed with the Staff's conclusion and found that, pursuant to the evidence presented, UMEREC's IRP meets all Section 6s(11) requirements and the Commission's IRP Filing Guidelines. PFD, p. 133. The ALJ also recommended that the Commission note that UMEREC's IRP is "designed to address the unique circumstances associated with UMEREC's Upper Peninsula customer base and to meet the objectives [of the] Amended and Restated Settlement Agreement (ARSA) approved in. [sic] U-17682." *Id.*

C. Positions of the Parties

1. The Commission Staff

The Staff moved to strike UPPCo's testimony regarding RSG charges because the Staff believes it is outside the scope of this matter and irrelevant. The ALJ stated that he "denied Staff's motion because I agreed with UPPCO that § 6s(4) allows the Commission to consider UPPCO's RSG charges." PFD, p. 148. The ALJ agreed with the Staff that MISO's FERC-approved RSG charges are "non-jurisdictional costs" within a Commission ratemaking proceeding. However, in light of the Commission's authority to consider other costs in Section 6s(4) and (5), and given the unique circumstances set forth in UMEREC's CON application, the ALJ asserted that the Commission should not "turn a blind eye to possible changes in RSG changes [sic] associated with the UP Gen Project." *Id.*, p. 149.

The Staff also moved to strike UPPCo's testimony regarding the UP Generation Project Baraga Township site because it is too speculative to be admissible. According to UPPCo, if the UP Generation Project Baraga Township site is approved, UPPCo would lose a potential building site and access to gas for a future generation plant. UPPCo claimed that it is currently developing its own IRP that ~~may~~ indicates that it may build generation to meet its own customers' energy and capacity needs.

The ALJ agreed with the Staff that Michigan Rules of Evidence (MRE), Rule 703, requires UPPCo to admit into evidence facts or data underlying its claim that it would lose a potential building site and access to gas for a future generation plant. However, the ALJ noted that UPPCo did not admit the indicated IRP into evidence. In addition, the ALJ found that UPPCo's testimony on this issue was not based on sufficient facts or data, and is therefore, unreliable.

The ALJ cited Michigan Supreme Court cases, which state that “the proponent of evidence bears the burden of establishing relevance and admissibility” and that admissible expert opinion testimony must have “some basis in fact.” PFD, p. 151, citing footnote 6 in *People v Crawford*, 458 Mich 376, 386; 582 NW2d 785, 791 (1998) and *Edry v Adelman*, 486 Mich 634, 641; 786 NW2d 567, 571 (2010).

The ALJ stated that according to MRE 703, “The facts or data in the particular case upon which an expert bases an opinion or inference shall be in evidence.” And, the ALJ asserted, MRE 702 provides that a witness may offer an opinion on a subject if the witness is qualified as an expert by knowledge or experience and if the witness’s expertise will “assist the trier of fact.” According to MRE 702, a qualified expert’s testimony is admissible if:

- (a) the testimony is based on sufficient facts or data,
- (b) the testimony is the product of reliable principles and methods, and
- (c) the witness has applied the principles and methods reliably to the facts of the case.

The ALJ determined that there is no dispute that UPPCo’s witness is a qualified expert witness. However, the ALJ found that his testimony was speculative and inadmissible regarding UPPCo’s future plans regarding the UP Generation Project’s Baraga Township site because it was not based on sufficient facts or data. Therefore, the ALJ recommended that the Commission affirm his decision to strike UPPCo’s testimony regarding the UP Generation Project’s Baraga Township site. PFD, p. 152.

2. Citizens Against Rate Excess

The ALJ stated that, in its initial brief, CARE presented three arguments: (1) the Commission has no authority to approve the Special Contract in a CON proceeding; (2) the Commission does not have the authority in a CON proceeding to allocate the costs of the UP Generation Project

between UMERC's non-Tilden customers and Tilden; and (3) the Commission has no authority to allocate PSCR costs in a CON proceeding or outside a PSCR proceeding. The ALJ noted that CARE presented no testimony or exhibits regarding these three arguments.

First, the ALJ found that "Rule 31(1) only requires UMERC to file an application for approval of the Tilden Special Contract. There is neither language in Rule 31 which requires UMERC to file an application for approval in a separate proceeding nor language which prohibits UMERC from filing a request for special contract approval with the Commission in a § 6s CON application proceeding." PFD, p. 156. In addition, the ALJ found that there is no language in Section 6s that prohibits UMERC from requesting Commission approval of the Special Contract. The ALJ determined that UMERC's CON application and the Special Contract are two interrelated components of UMERC's UP Generation Project proposal, and separate proceedings are unnecessary and an inefficient use of time and resources. The ALJ also found that, similarly, the Commission approved a CPCN and a special contract in a single proceeding in Case Nos. U-8940 and U-10957. Therefore, the ALJ rejected CARE's argument that the Commission may not consider approval of the Special Contract in a CON proceeding.

Second, in response to CARE's argument that the Commission does not have authority to allocate the costs of the UP Generation Project between UMERC's non-Tilden customers and Tilden, the ALJ found that Section 6s contains various provisions which permit a CON applicant to request, and the Commission to grant, cost recovery relief: Sections 6s(3)(d), (5), and (12). In addition, the ALJ cited MCL 460.6(1), which provides the Commission plenary power and jurisdiction to regulate all rates, fares, fees, charges, services, rules, conditions of service, and all other matters pertaining to the formation, operation, or direction of public utilities.

The ALJ found that the statute cited by CARE, MCL 462.11, pertains to discrimination in offering special contracts and is irrelevant to the allocation of costs among UMEREC's special contract customers and tariff customers. And, citing Case No. U-11084, the ALJ stated that the order "clearly indicated that [the Commission] can consider and can authorize an allocation of costs between special contract customers and the non-special contract customers if the utility meets one of the two options." PFD, p. 161. As a result, the ALJ found that UMEREC's request for Commission approval of cost recovery is within the Commission's ratemaking authority.

Third, the ALJ agreed with UMEREC that neither the PSCR statutes, nor a prior Commission order, prohibit the Commission from issuing an order regarding how such costs will be addressed in future rate cases and PSCR proceedings. In addition, the ALJ stated that "there are no provisions in MCL 460.6j which stated that firm natural gas costs may only be approved in a rate case, PSCR plan, or reconciliation proceeding." PFD, p. 162.

3. Cloverland Electric Co-operative

According to Cloverland, the ALJ stated, UMEREC failed to demonstrate that the proposed generation facilities will not negatively impact Cloverland's customers or service in the UP. The ALJ noted that Cloverland failed to provide any testimony or exhibits on this issue, and instead, relied upon UPPCo's testimony to support the claim. The ALJ found that UPPCo's arguments on this issue have no merit, and stated that there is no reason to revisit this issue in response to Cloverland. PFD, p. 166.

The ALJ noted that although Cloverland raises concerns regarding the VLR/RSG payments, Cloverland neither provided evidence regarding the current customer VLR/RSG payment, nor evidence regarding why it believes that those payments would increase if the Commission approves UMEREC's UP Generation Project. The ALJ found that Cloverland presented no

evidence that it will suffer harm, and therefore he rejected Cloverland's proposal to include language in the order that holds Cloverland harmless from cost risks for the UP Generation Project. *Id.*, p. 167.

Cloverland argued that UMER's IRP does not comply with Section 6s(11), however, the ALJ stated that Cloverland presented no evidence to support this position, and instead relied on ELPC's testimony. The ALJ "concluded that UMER's IRP complied with all requirements [of Section 6s(11)] and ELPC's argument to the contrary had no merit." *Id.*

Finally, Cloverland asserted that UMER's filing in this matter must comply with Section 6s as amended by Act 341. The ALJ noted that this issue was addressed in section III *supra*.

4. Environmental Law and Policy Center

The ALJ stated that ELPC argued that UMER's CON application and IRP do not meet the requirements of Section 6s or the Filing Requirements because both fail to "fully evaluate renewable energy and storage alternatives that could partially displace the proposed RICE facilities." PFD, p. 134, quoting ELPC's initial brief, p. 7. In addition, the ALJ noted, ELPC contended that UMER is using the Special Contract as justification for what ELPC believes is a legally inadequate IRP.

The ALJ found that ELPC ignored the facts regarding the unique nature of the UP customer base and service area. The ALJ stated that, "Given the evidence presented, the addition of renewable energy alternatives to UMER's IRP, would if implemented, more than likely result in additional and not less costs." *Id.*, pp. 138-139. The ALJ explained that the evidence shows that wind and solar cannot partially displace the capacity provided by the UP Generation Project because UMER would still need the 183 MW from the RICE electric generation facilities. *See*,

3 Tr 232-233. Therefore, the ALJ found that ELPC's argument that UMERC's IRP violates Section 6s(11)(f) is not supported by the evidence on the record and is without merit.

The ALJ also determined that, contrary to ELPC's claim, UMERC's IRP does not violate Michigan law and IRP best practices because it utilized a single-source analysis to determine whether RE could partially displace the UP Generation Project. The ALJ asserted that "the mere fact that ELPC . . . would have completed UMERC's IRP using a different modeling software or approach does not render UMERC's IRP in violation of [Section] 6s(11)(f)." PFD, p. 141. The ALJ found that UMERC's IRP shows that the UP Generation Project is the most reasonable and prudent method of meeting UMERC's power need as required by Section 6s(3)(b).

Finally, according to ELPC, the ALJ noted, UMERC's IRP was predetermined by the terms of the Special Contract. The ALJ acknowledged that the Special Contract provides for a specific type of generation. However, the ALJ asserted that there is no language in the Special Contract indicating that UMERC was not required to submit an IRP as required by Section 6s(11). The ALJ determined that UMERC prepared and filed an IRP consistent with Section 6s(11). And, the ALJ stated, there is no evidence on the record that the Special Contract relieved UMERC of the requirements of Section 6s(11) or led the IRP in a predetermined direction. Therefore, the ALJ found that ELPC's arguments to the contrary are without merit.

5. GlidePath Development LLC

The ALJ noted that GlidePath presented three arguments: (1) UMERC did not comply with Section 6s(11) because it failed to properly model and analyze resource options in its IRP; (2) UMERC failed to solicit alternatives to the UP Generation Project because the company did not issue RFPs; and (3) UMERC failed to complete a cost analysis and review of alternatives to

the UP Generation Project and shifted the burden to prove cost-effectiveness of alternatives to GlidePath.

First, the ALJ found that GlidePath's argument that UMERC's IRP does not comply with Section 6s(11)(f) is identical to ELPC's argument, and the ALJ reiterated that he found ELPC's arguments unpersuasive and without merit.

Second, the ALJ stated that although GlidePath's "beliefs regarding PPA solicitations may have been true in some situations in the past, there is no language in § 6s(1) which requires UMERC to meet all or part of its projected power need through a PPA with an IRP." PFD, p. 153. And, the ALJ asserted, there is no language in Section 6s requiring UMERC to analyze every possible unsolicited proposal in its IRP.

Third, the ALJ disagreed that UMERC's IRP is incomplete because it shifts the burden of proving the cost-effectiveness of an alternative generation solution to GlidePath. The ALJ opined that this claim is just another version of GlidePath's argument that UMERC's IRP is flawed because it does not contain GlidePath's unsolicited proposal. *Id.*, p. 155. The ALJ stated that he previously found that UMERC's IRP complies with all of the Section 6s(11)(f) requirements, and there is no reason to revisit the adequacy of the IRP.

6. Michigan Technological University

In response to MTU's request that the Commission condition its approval of UMERC's CON upon a commitment by the company to ensure that there is an adequate supply of natural gas available to all customers relying on the NNG pipeline, the ALJ found that there was no evidence on the record that UMERC's UP Generation Project will reduce availability of NNG gas to MTU. The ALJ stated that UMERC is not the supplier of natural gas to MTU and cannot guarantee the availability of natural gas and has no duty to do so. PFD, p. 169.

7. Upper Peninsula Power Company

According to UPPCo, UMERCo's two-site UP Generation Project proposal is more costly than a single-site project in Negaunee Township. Relying on UMERCo's testimony that the Lakota-Winona project is still in the MISO MTEP17 project database and that ATC's current configuration plan is temporary and not a reliable long-term solution, the ALJ found that UPPCo's analysis of the cost difference between a single-site and two-site proposal contained errors and that it will be more expensive for UPPCo's customers if all the RICE units were built at the Negaunee Township site. PFD, pp. 143-148, citing 3 Tr 249-253, 338-342; 4 Tr 680.

D. Tilden Special Contract

The ALJ reviewed Exhibit A-25, the Special Contract, and volume 3 of the transcript, pages 145-158, which contained UMERCo's testimony regarding the terms and conditions of the Special Contract. The ALJ asserted that "[n]o party submitted evidence which supports a denial of the Special Contract." PFD, p. 172. In fact, the ALJ stated, the evidence shows that the Special Contract is a long-term solution to the UP energy issue, is the key component of the UP Generation Project, is consistent with the terms and conditions of the ARSA, allows for the retirement of PIPP, reduces the risk of future SSR payments, and provides savings to non-Tilden customers. *Id.* Furthermore, the ALJ found that UMERCo considered the financial risks to non-Tilden customers and included protections in the Special Contract. Therefore, the ALJ concluded that the preponderance of the evidence shows that the Special Contract is reasonable, in the public interest, and should be approved.

The ALJ noted that the Staff, CARE, and Fibrek argued that the Commission should reject the ratemaking treatment requested by UMERCo in the Special Contract. The ALJ stated that both the Staff and Fibrek contended that UMERCo has not met either standard set forth in the March 23

order because the company failed to provide a COSS. Although UMERC admitted that it did not file a COSS because it was unable to do so, the ALJ noted that the company asserted that it presented sufficient evidence to show that the benefits for non-Tilden customers are substantial and have a value that outweighs the costs that are not recovered from the contract customer. The ALJ stated that UMERC believes that it satisfied the March 23 order's second option through its IRP and testimony. PFD, pp. 174-175.

The ALJ stated that:

No evidence was presented which shows that Commission approval of UMERC's requested cost recovery relief, the allocation of costs between Tilden and non-Tilden customers consistent with the terms of the Tilden Special Contract, would harm non-Tilden customers or would shift costs from Tilden to non-Tilden customers. However, the evidence presented does show that UMERC has not satisfied the U-10646 Order COSS requirement.

Id., p. 176.

The ALJ noted that there is no statute or administrative rule that requires a special contract to be supported by a COSS, nor that a COSS is the only means to support cost allocations. And, the ALJ stated, the facts and circumstances in Case No. U-10646 are notably different than those in this case: UMERC is a relatively new utility, and Tilden is not currently a UMERC customer; and, in Case No. U-10646, The Detroit Edison Company (Detroit Edison) was an established utility seeking Commission approval of special contracts with its existing large energy customers. The ALJ pointed out that because it had ongoing relationships with its customers, Detroit Edison was able to produce a COSS from the company's historical financial data. The ALJ stated that UMERC, on the other hand, does not have the ability to produce a COSS, and instead must rely on its IRP and other projected data as it relates to its largest future customer, Tilden. *Id.*

The ALJ found that the March 23 order does not provide an exception to its COSS requirement. Therefore, the ALJ agreed with the Staff and recommended that the ratemaking

treatment in the Special Contract be deferred until UMEREC has the ability to provide a COSS as required by the March 23 order.

In response to CARE's and Fibrek's recommendation that the Commission deny UMEREC's request to allocate costs according to the Special Contract because the company's request is contrary to MCL 460.11(1), the ALJ found their arguments to be without merit. The ALJ stated that CARE's and Fibrek's reliance on MCL 460.11(1) is misplaced because this section applies to COSS allocations in general electric rate cases.

E. Power Supply Cost Recovery Costs

The ALJ noted that UMEREC requested that the Commission include all of the company's PSCR costs in the PSCR calculation, including the costs associated with serving Tilden's load. The ALJ stated that, according to UMEREC, "Tilden will be paying for fuel costs to operate the RICE units for its load, purchases, and sales of power from MISO for its load and output of the RICE units operated for its load, and transmission costs per the terms of the Tilden Special Contract." PFD, pp. 177-178, citing 3 Tr 92. UMEREC will credit the monthly revenues billed by the company to Tilden for energy and transmission to the total UMEREC PSCR costs, with the remaining amount of power supply costs collected from non-Tilden customers via the PSCR mechanism. *Id.*, p. 178. The ALJ noted that UMEREC will include a reconciliation to Tilden-billed costs and revenue within the annual PSCR mechanism. Additionally, the ALJ stated that UMEREC requested approval to recover annual firm natural gas costs as PSCR costs, and UMEREC has agreed to the Attorney General's recommendations regarding the PSCR costs.

The ALJ found that no evidence was presented opposing UMEREC's requested PSCR treatment and he therefore recommended Commission approval.

F. Accounting and Ratemaking Approvals

The ALJ stated that UMEREC requested approval of certain accounting and ratemaking treatment of financing costs incurred during the construction period as set forth in the company's application. The ALJ noted that the Staff supported UMEREC's request, and that no other party offered evidence or exhibits regarding the company's AFUDC request. Therefore, the ALJ found that there was a preponderance of the evidence that UMEREC's accounting and ratemaking treatment request is reasonable and prudent and should be approved.

VIII. EXCEPTIONS AND REPLIES

A. Exceptions

1. Upper Michigan Energy Resources Corporation

UMEREC filed only one exception, contending that the PFD's recommendation that the Commission defer consideration of the company's cost recovery relief is contrary to the ARSA, is not required by the March 23 order, and would require UMEREC to assume substantial risk.

UMEREC argues that, pursuant to MCL 460.6 and Section 6s(5), (6), (9), and (12) of Act 286, the Commission has broad ratemaking authority to authorize the company to allocate, during the term of the Special Contract, the cost to construct, own, and operate the RICE electric generation facilities to UMEREC's non-Tilden customers. UMEREC asserts that it also has the authority to recover these costs from UMEREC's non-Tilden customers in rates set in future company rate proceedings, consistent with the pricing terms of the Special Contract. In addition, the company states that "the parties to the ARSA agreed that UMEREC would receive assurance of cost recovery in this CON proceeding." UMEREC's exceptions, p. 23 (emphasis in the original).

According to UMEREC, the Commission should grant the company's requested cost recovery relief because UMEREC has provided competent, material, and substantial evidence of significant

cost savings and other benefits to the company's non-Tilden customers in full satisfaction of the policy concerns in the March 23 order. UMERC asserts that, in addition to the cost savings, the benefits of the UP Generation Project include enhanced electric reliability, retirement of PIPP, avoidance of costly transmission upgrades, and avoidance of future SSR payments. *Id.*, p. 25. Furthermore, the company states that it has demonstrated protections for non-Tilden customers.

UMERC agrees with the ALJ that there is no statute or administrative rule that requires that ratemaking for a special contract be supported by a COSS. In the March 23 order, UMERC notes, the Commission provided Detroit Edison options to make a compelling showing for ratemaking treatment of its special contract, but did not state that these options were the exclusive means by which this standard could be met. UMERC reiterates that "[i]f a traditional COSS were the only means of meeting the second option [in the March 23 order], as the PFD appears to suggest, there would be no meaningful distinction between the two options." UMERC's exceptions, p. 27. UMERC avers that its IRP cost analysis is a type of COSS and is a better means of meeting the second option in the March 23 order than a traditional COSS. *Id.*

UMERC claims that without assurance that its investment in the new plant will be fully recovered through Michigan retail rates, the company assumes substantial risk. UMERC disputes the Staff's assessment that the future risk to the company is minimal. In the company's opinion, "UMERC has already assumed various risks in order to provide protection to UMERC's non-Tilden customers and make the UP generation solution a reality. UMERC should not have to assume the additional risk of constructing, owning and operating the RICE electric generation facilities without the assurance of full cost recovery." UMERC's exceptions, p. 31, quoting 3 Tr 104.

2. The Commission Staff

The Staff takes exception to the ALJ's decision not to strike UPPCo's testimony regarding the RSG charges, stating that these charges are beyond the proper scope of this proceeding and are irrelevant.

The Staff asserts that pursuant to Section 6s(1) of Act 286, the utility may request certain regulatory approvals for a qualifying construction project. Specifically, the Staff states, the utility may ask that the Commission certify that the project's estimated capital costs and financing plan, including "the costs of siting and licensing a new facility and the estimated *cost of power* from the new or proposed electric generation facility, will be recoverable in rates." Staff's exceptions, p. 4, quoting MCL 460.6(1) (emphasis added). The Staff notes that, similarly, Section 6s(4)(c) of Act 286 requires the Commission to consider whether the "estimated cost of power from the existing or proposed electric generation facility . . . is reasonable." Additionally, the Staff contends that the utility must file an IRP that compares the cost of the project with the cost of possible alternatives. If approved, the Staff states, "the Commission must 'specify the costs approved for the construction of' the project in its order." Staff's exceptions, p. 4, quoting MCL 460.6s(6). The Staff avers that all of these statutory sections focus on the cost of power or the cost of construction, and that RSG charges are not related to the cost of power or cost of construction. Although Section 6s(5) of Act 286 states that the Commission may consider other costs, the Staff contends that the Commission is not required to.

The Staff argues that UPPCo's FERC-approved RSG charges are unrelated to UMERCo's CON request. The Staff reiterates that the RSG charges are not related to the cost of power or the cost of constructing UMERCo's proposed RICE electric generation facilities and are not costs that UMERCo or its customers will pay. If UPPCo has an issue with the RSG charges after the UP

Generation Project is complete, the Staff states that UPPCo should address those concerns with the FERC.

3. Citizens Against Rate Excess

In its exceptions, CARE reiterates that Rule 31 contemplates a special purpose case for approval of a special contract and that there is no language in the rule that authorizes the joining of a CON application case and an application for approval of a special contract.

CARE notes that the ALJ found that the Commission has plenary power pursuant to MCL 460.6(1) and can “create its statutory authority as it wishes as long as there is no ‘specific provision’ . . . prohibiting such action.” CARE’s exceptions, pp. 2-3, quoting the PFD, pp. 156-157. CARE argues that the ALJ’s reasoning is contrary to well-established law and that the Commission only has powers designated by statute. *Id.*, p. 3. CARE asserts that CON proceedings are governed by Section 6s of Act 286. The statute contains a detailed list of approvals the Commission may grant in a CON proceeding, however, CARE states, the list does not include approval of a special contract.

CARE does not dispute the ALJ’s denial of UMER’s request for special accounting. However, according to CARE, the ALJ erred in determining that the company’s requested cost recovery relief and allocation of costs would not harm non-Tilden customers and does not shift costs from Tilden to non-Tilden customers. CARE states that UMER admitted in its testimony that non-Tilden customers will receive only 30% of the power from these two plants, but will be paying for 50% of the capital costs in a future rate case proceeding. CARE claims that this demonstrates a shift of costs to non-Tilden customers. CARE’s exceptions, p. 5.

The ALJ found that the PSCR statutes do not prohibit the Commission from issuing an order determining how PSCR costs will be addressed in future rate cases or PSCR proceedings, and

therefore, the PSCR costs may be allocated in a CON proceeding. CARE disagrees and asserts that “[s]uch a rationale locks in certain PSCR cost allocations and methodologies before the PSCR costs are determined.” *Id.*, p. 8. CARE argues that there is no authority granted to the Commission in Section 6s of Act 286 to assign PSCR costs in CON proceedings – this is specifically done in PSCR and general rate proceedings.

Regarding the ALJ’s findings on the ARSA, CARE states that there should be a clarification to ensure that the Commission is mindful of the entire agreement. CARE contends that the ALJ failed to include paragraph 6.c in his list of ARSA objectives which states, in pertinent part: “No other Michigan customer’s retail rates will be increased as a result of the special contracts entered into between Wisconsin Electric and the Mines.” CARE’s exceptions, p. 9. CARE argues that non-Tilden customers’ rates will increase if the Special Contract is approved.

In addition, CARE asserts that the ALJ failed to note that paragraph 6.g.iii of the ARSA states: “If WEC and the Mines are unable to agree to a rate, or any other term of service in the agreement, the MPSC shall have the authority to resolve the dispute under a just and reasonable standard.” *Id.*, p. 10. CARE opines that this omission in the PFD is important because it seems to suggest that the ALJ believes that the Special Contract is a “take it or leave it” proposition, and that the mines will abandon their obligations under the ARSA if the Special Contract is not adopted as presented. *Id.* Instead, CARE argues, the Commission has the authority to resolve disputed terms of the Special Contract under a just and reasonable standard in a dedicated proceeding.

4. Cloverland Electric Co-operative

In its exceptions, Cloverland recommends that the Commission deny UMER’s requested CONs and CPCNs because the proposed RICE electric generation facilities will have negative impacts on Cloverland’s customers and service in the UP. Cloverland reiterates that UMER’s

proposal to construct and operate the RICE electric generation facilities at two separate sites is flawed, as argued by UPPCo. And, Cloverland asserts, if the RICE electric generation facilities are overbuilt, there is a possibility that it could increase VLR/RSG payments.

Cloverland also disputes the ALJ's determination that UMERCE's IRP meets the requirements of Section 6s(11). As set forth in its testimony and briefing, Cloverland restates that the IRP analysis performed by UMERCE was inadequate. Cloverland's exceptions, pp. 4-6.

5. Environmental Law and Policy Center

ELPC reiterates that UMERCE did not comply with Section 6s(11)(c) and (f) of Act 286 and the Commission's regulations because the company failed to fully evaluate RE and storage alternatives that could partially displace the proposed RICE electric generation facilities. ELPC claims that UMERCE's IRP was legally insufficient because the IRP contained no cost estimates for RE alternatives. ELPC's exceptions, pp. 4-7.

6. GlidePath Development LLC

Like ELPC, GlidePath argues in its exceptions that the PFD erroneously concluded that UMERCE complied with Section 6s(11)(f) of Act 286. Relying on ELPC's testimony, GlidePath states that UMERCE's IRP utilized a single-technology solution to address UMERCE's entire 183 MW of identified need and failed to analyze the availability and costs of other electric resources that could defer, displace, or partially displace the proposed RICE electric generation facilities. GlidePath's exceptions, pp. 3-4. GlidePath asserts that the PFD did not consider the statutory requirements and all record evidence. GlidePath recommends that the Commission reject UMERCE's CON application, or in the alternative, refer the proceedings to the ALJ for the purpose of including a complete, statutorily compliant IRP.

7. Tilden Mining Company L.C.

Although Tilden supports the ALJ's recommendation that the Commission approve the Special Contract, Tilden takes exception to his recommendation to deny UMERC's requested ratemaking treatment until UMERC files a COSS.

Tilden states that according to the ALJ, the March 23 order did not provide an exception to the COSS requirement. However, Tilden requests that the Commission consider that Case No. U-10646 may be potentially inapplicable because there are significant differences between Case No. U-10646 and the immediate case. Furthermore, Tilden asserts, a COSS is not the only way to demonstrate that a special contract will provide substantial benefits to other ratepayers: the "record evidence in this case supports a finding of sufficient benefits to warrant providing UMERC's requested ratemaking assurances." Tilden's exceptions, p. 4.

8. Upper Peninsula Power Company

UPPCo takes exception to the ALJ's determination that construction of two electric generation facilities on two separate sites will not increase costs and will not cause UPPCo and its customers to incur higher RSG costs. UPPCo states that the ALJ's conclusion rejects testimony and evidence, which, UPPCo argues, clearly shows that UMERC is improperly counting \$100 million in savings associated with the cancellation of the Lakota-Winona transmission upgrade project. UPPCo asserts that when those savings are removed, it demonstrates that the two-site generation proposal is not the least-cost option. UPPCo's exceptions, pp. 2-3.

UPPCo also alleges that the ALJ erroneously granted the Staff's motion to strike UPPCo's testimony on its future generation activities. UPPCo argues that its testimony demonstrated that "UMERC's decision to build two generating facilities and position one of those facilities, which Mr. Wallin demonstrated to be unnecessary, at a critical transmission juncture, substantially

impacts other Upper Peninsula utilities, which is a principle concern of MCL 460.6s.” UPPCo’s exceptions, p. 6. Therefore, UPPCo asserts that its testimony relating to the impact of construction at the Baraga Township site on utilities, including UPPCo, is not speculative, is properly within the scope of matters addressed by Section 6s of Act 286, and was improperly stricken.

B. Replies to Exceptions

1. Upper Michigan Energy Resources Corporation

In reply to CARE’s recommendation that the Commission reject the Special Contract, UMERC asserts that the ALJ completed a full analysis of the Special Contract, the record evidence, and applicable law and appropriately found that the Special Contract is reasonable, prudent, and in the public interest, and is within the Commission’s authority to approve. UMERC restates that CARE’s recommendation was raised too late in this proceeding, and in any event, the Commission has administrative authority and plenary jurisdiction and power to approve a special contract in a CON proceeding. UMERC’s replies to exceptions, pp. 2-8.

Replying to CARE’s claim that Commission approval of the requested cost relief would harm non-Tilden customers, UMERC reiterates that “the record contains no evidence that granting UMERC’s requested cost recovery relief would harm non-Tilden customers or result in non-Tilden customers absorbing any discount provided to Tilden under the Tilden Special Contract.” *Id.*, p. 9. UMERC also states that, contrary to CARE’s arguments, the Commission has the authority to approve the company’s proposed treatment of PSCR costs. *Id.*, pp. 12-15.

In response to CARE’s claim that the ALJ failed to account for the language in paragraphs 6.c and 6.g.iii of the ARSA, UMERC argues that neither of the cited provisions supports CARE’s position. UMERC states that the “‘special contracts’ in ¶ 6.c. are a reference to ¶ 7 of the ARSA, which discusses two specific special contracts. . . . Those special contracts are different from the

Tilden Special Contract in this case. Thus, ¶ 6.c. is not a reference to the Tilden Special Contract, is irrelevant to this case, and does not support any argument by CARE that is based thereon.”

UMERC’s replies to exceptions, p. 16. UMERB also asserts that paragraph 6.g.iii is only applicable if the agreement for the investment described in paragraph 6.g.ii was not executed by December 31, 2016. According to UMERB, the Special Contract was signed on August 12, 2016, and, therefore, CARE provided no explanation of how paragraph 6.g.iii applies to this case. And, UMERB states, the Commission is not presented with a situation in which UMERB and Tilden are unable to agree to a rate or any other term of service in the agreement. Thus, CARE’s reliance on paragraphs 6.c and 6.g.iii are baseless and irrelevant, and should be rejected.

UMERC notes that, in Cloverland’s exceptions, Cloverland argues that the ARSA requires that the decision to build the RICE electric generation facilities must be both reasonable and prudent and in the best interest of all Michigan customers, not just UMERB’s customers. UMERB contends that Cloverland is referencing paragraph 6.g.iii of the ARSA, as discussed above. In response, the company states that this argument has been addressed and that the Commission should find it meritless.

Regarding ELPC’s claim that UMERB’s IRP failed to meet the requirements of Section 6s of Act 286 because it did not adequately consider RE and storage, UMERB cites testimony and exhibits, reiterates the arguments set forth in its briefing, and references PFD sections finding that the company provided sufficient evidence to demonstrate compliance with Section 6s. UMERB’s replies to exceptions, pp. 19-32. In addition, UMERB states, the fact that the company does not presently propose to construct RE or utilize battery storage, it does not foreclose these possibilities in the future. UMERB avers that it does not intend for its IRP to be precedential, long-term, or as a rejection of future RE and battery storage possibilities. *Id.*, p. 32.

UMERC states that GlidePath's exceptions mirror many of ELPC's exceptions. Like its response to ELPC, UMEREC cites testimony and exhibits, reiterates the arguments set forth in its briefing, and references applicable PFD sections finding that the company considered a full range of supply options in the IRP. UMEREC argues that its IRP satisfies Sections 6s(4)(d) and (11)(f) of Act 286, and recommends that the Commission reject GlidePath's exceptions. *Id.*, pp. 41-46.

UMERC notes that UPPCo's exceptions claimed two errors in the PFD: (1) that UMEREC's proposal to construct RICE electric generation facilities at the Baraga Township site will not result in increased costs and will not cause UPPCo and its customers to incur higher RSG costs; and (2) that the Staff's motion to strike should be granted. In reply to UPPCo's first claim, UMEREC asserts that the ALJ's conclusions were fully supported by the record and cites applicable testimony and exhibits. *Id.*, pp. 34-40, citing 3 Tr 249-253, 338-342; Exhibits A-10, A-11, A-12, A-13, A-14, and A-15. Responding to UPPCo's second claim, UMEREC defers to the Staff to respond to this exception.

2. The Commission Staff

In response to CARE's claim that "[n]o legal authority exists to seek approval of a Rule 31 special contract in a CON case," the Staff states that Rule 31 does not specify the type of proceeding in which a special contract may be filed. Staff's replies to exceptions, p. 27, quoting CARE's exceptions, p. 10. The Staff argues that because Rule 31 is silent regarding when and where an application for approval of a special contract shall occur, the Commission retains discretion to decide.

The Staff notes that, according to CARE, the ALJ erred in finding that there is no evidence of cost shifting. CARE alleged that Tilden will consume about 70% of UMEREC's load, but only pay 50% of the capital costs. The Staff explains that consuming 70% of the load does not equate to

being responsible for 70% of the costs. And, although Tilden will pay 50% of the capital costs, the Staff points out that Tilden has agreed to pay 100% of the new plant's O&M expenses. Staff's replies to exceptions, pp. 28-29.

In response to Cloverland's and UPPCo's claim that their RSG charges may increase if UMERB builds its proposed RICE electric generation facilities, the Staff states that Cloverland did not provide any evidence in support this claim and that UPPCo failed to compare UPPCo's projected RSG charges with its current charges. The Staff cites UMERB's testimony, which opines that a comparison of projected RSG charges with current charges shows that UPPCo's RSG charges will decrease, probably more than 75%, if UMERB builds at two sites instead of one. *Id.*, p. 17, citing 3 Tr 251.

Replying to ELPC's argument that, in its IRP, UMERB failed to evaluate resources that could partially displace the proposed RICE electric generation facilities, the Staff states that "if UMERB attempts to use renewable-energy resources, even in part, to meet its capacity shortfall, it would still need 183 MW of baseload generation to anchor supply in the Upper Peninsula." Staff's replies to exceptions, p. 10. In any event, the Staff asserts, UMERB evaluated resources that could partially displace the proposed UP Generation Project and the costs and found that the RICE electric generation facilities will save the company's non-Tilden customers \$161 million in NPV over 30 years compared to the next best alternative. *Id.*, p. 12, citing 3 Tr 224.

The Staff notes that the arguments set forth in GlidePath's exceptions are substantially similar to those of ELPC, which were addressed above. In response to GlidePath's claim that "there was no analysis performed of other generating resources," the Staff asserts that the exact purpose of the HDR Report was to analyze other options. *Id.*, quoting GlidePath's exceptions, pp. 4, 6. The Staff acknowledges that although more work can be done in the future to diversify UMERB's portfolio,

the company's proposed RICE electric generation facilities are the right generation solution now; they are specifically tailored for UMERC and its customer base in the UP and are the culmination of years of work to resolve projected capacity shortfalls. *Id.*, p. 14.

Regarding the issue of allocating to non-Tilden customers the costs to construct, own, and operate the RICE electric generation facilities, the Staff reiterates that UMERC failed to support its request with the required COSS. The Staff states:

UMERC argues that without assurances that it will recover the costs of its proposed project, UMERC will assume substantial risk. (UMERC's Exceptions, pp 30–31.) The Company also argues that the Special Contract so clearly benefits its non-Tilden customers that the Company does not need to back up its request for special ratemaking treatment with a cost-of-service study. (*Id.* at 24–30.) The Company cannot have it both ways. If its evidence about the need for special ratemaking treatment is as compelling as the Company suggests, then there is little to no risk that a cost-of-service study will not confirm it. On the other hand, if the Company is assuming substantial risk, then its evidence cannot be as compelling as the Company suggests.

Staff's replies to exceptions, p. 23. The Staff believes that UMERC's evidence is compelling, and therefore, there is little risk that the company will not be allowed to charge its proposed rates or recover its costs.

And, despite how compelling the IRP and supporting testimony are, the Staff asserts that no utility should be relieved of the duty to file a COSS to prove that the costs allocated to other customers by a special contract are justified. Regardless, the Staff argues, to meet the "compelling showing" requirement in the March 23 order so that a utility may reallocate the costs of serving customers to other ratepayer classes, there are two options, and the language of the March 23 order states that "[e]ither showing would require support from a cost-of-service study that identifies and quantifies all costs incurred under the contracts." Staff's replies to exceptions, p. 24, quoting the March 23 order, p. 21.

In response to UPPCo's claim that construction of the RICE electric generation facilities will not result in deferral of the \$100 million upgrade to the Lakota-Winona transmission line, the Staff restates the arguments set forth in its testimony and briefing. Again, the Staff argues that sufficient evidence was provided to show that construction of the UP Generation Project Baraga Township site will remove the need for the Lakota-Winona transmission line upgrade and will provide significant savings to UPPCo's and UMEREC's customers.

Regarding UPPCo's argument that the ALJ erred in partially granting the Staff's motion to strike, the Staff asserts that UPPCo failed to explain why its testimony was not speculative. The Staff argues that the ALJ's decision should only be overturned if the Commission finds that he abused his discretion. The Staff states that UPPCo failed to demonstrate that the ALJ abused his discretion in partially granting the Staff's motion to strike.

3. Citizens Against Rate Excess

CARE disputes UMEREC's claim that the company provided "uncontroverted substantial evidence" that there are significant cost savings to non-Tilden customers as a result of the deferral of the Lakota-Winona transmission line upgrade. CARE's replies to exceptions, p. 2, quoting UMEREC's exceptions, p. 24. CARE states that UMEREC's purported \$100 million cost savings may not be due to the proposed UP Generation Project, but instead may be the result of ATC's transmission reconfiguration or other unforeseen developments or alternative projects. *Id.*, pp. 2-6.

In addition, CARE reiterates that the ALJ failed to consider paragraph 6.c of the ARSA and requests deferred consideration of UMEREC's cost recovery to avoid substantial risk to non-Tilden customers.

4. Cloverland Electric Co-operative

In reply to UMERC's and Tilden's request that the Commission approve the cost recovery relief for the Special Contract, Cloverland asserts that the ALJ correctly applied Commission precedent. Cloverland argues that there is no compelling reason in this case for the Commission to abandon its established requirements. Cloverland's replies to exceptions, pp. 2-3. In addition, Cloverland notes, UMERC failed to cite any past Commission decision where a utility was able to forego the Commission requirements in the March 23 order. Similar to CARE, Cloverland argues that deferral of consideration of the requested cost recovery relief is consistent with the ARSA.

5. Fibrek Inc.

Like the Staff, CARE, and Cloverland, Fibrek recommends that the Commission defer consideration of UMERC's requested cost recovery relief until after UMERC makes the COSS showing required by the March 23 order. Fibrek's replies to exceptions, pp. 2-4. Fibrek also argues that deferral of consideration of the requested cost recovery relief is consistent with the ARSA.

6. Tilden Mining Company L.C.

Replying to ELPC and GlidePath, Tilden avers that the ALJ correctly determined that UMERC's IRP demonstrated that the proposed RICE electric generation facilities are the most reasonable and prudent means for meeting the power need in compliance with Section 6s. Tilden asserts that UMERC evaluated alternatives to the proposed RICE electric generation units, including the continued operation of PIPP, a new combined-cycle generating facility, RE, EWR, load management, demand response, and electric transmission options. In addition, Tilden argues that wind and solar generation is unable to displace a portion of the RICE electric generation units because "[s]olar installations would have been limited to providing power during the day, and

wind facilities are limited to providing power when the wind resource is available. Neither alternative meets the power needs of UMEREC's customers, which demand power 24/7." Tilden's replies to exceptions, p. 3. Tilden explains that the proposed resource mix recommended by ELPC and GlidePath would simply add costs to meeting the power needs of the UP because they would be incremental resources to baseload generation.

In response to CARE's assertion that the Commission has no authority to approve a special contract or the allocation of costs to customers not a party to the special contract in a CON proceeding, Tilden states that the Commission indeed has authority under MCL 462.11 and Rule 31. Tilden also argues that the Commission may approve a special contract on an *ex parte* basis.

Tilden disputes UPPCo's claim that construction of the UP Generation Project at the Baraga Township site is unnecessary and harmful to customers. According to Tilden, the evidence shows that UMEREC demonstrated the need for the power from the proposed RICE electric generation units and that locating units at the Baraga Township site avoids \$100 million in costs to upgrade the Lakota-Winona transmission line. In addition, Tilden states that MISO's operating guidelines are not a permanent solution to resolve the reliability issues in the UP that gave rise to the White Pine SSR agreement. Finally, Tilden reiterates that construction of the RICE electric generation units at the Baraga Township site will not result in increased RSG charges. Tilden's replies to exceptions, pp. 6-7.

IX. DISCUSSION

A. Upper Michigan Energy Resources Corporation's Application for Approval of a Certificate of Necessity and Integrated Resource Plan

Section 6s(4) of Act 286 states that the Commission shall grant the CON request if it determines that:

1. The utility has demonstrated through its approved IRP that the power to be supplied is needed;
2. The existing or proposed electric generation facility will comply with all applicable state and federal environmental standards, laws, and rules;
3. The estimated cost of power from the existing or proposed electric generation facility or the price of power in the PPA is reasonable;
4. As compared to other resource options for meeting power demand, the existing or proposed electric generation facility or proposed PPA is the most reasonable and prudent means of meeting demand; and
5. To the extent practicable, the construction or investment in a new or existing facility is completed using a workforce composed of Michigan residents, as determined by the Commission.

Pursuant to Section 6s(5) of Act 286, the Commission may consider any other costs or information related to costs associated with the power to be supplied by the existing or proposed electric generation facility or the proposed PPA, or alternatives proposed by intervenors.

Section 6s(6) of Act 286 states that the Commission shall specify the costs approved for the construction of or significant investment in the electric generation facility and the price approved for the purchase of the existing electric generation facility, or the price approved for the purchase of power pursuant to the terms of the PPA. If the Commission denies any of the relief requested by an electric utility, the utility may withdraw its application or proceed with the proposed construction, purchase, investment, or PPA without a CON and the assurances granted under this section. MCL 460.6s(8).

Section 6s(10) of Act 286 requires the Commission to adopt standard application filing forms and instructions for use in all CON requests. On December 23, 2008, in Case No. U-15896, the Commission adopted Filing Requirements.

1. Certificate of Necessity Filing Requirements and Instructions

a. Section V

The utility must identify the relief requested; the utility may seek one or more of the certificates set forth in Section 6s(3) of Act 286. UMERG stated that it is requesting a CON pursuant to Section 6s(3)(a), (b), and (d) of Act 286, and the company provided an extensive description of the total capacity, forecasted annual firm peak demand, and its planning load level, as set forth in section IV.A above. The company employed HDR to complete an evaluation of the power generation options in the UP to serve UMERG's customers.

b. Section VI

The utility shall identify the projected resource requirements and the expected timing of the requirements and shall file an IRP that identifies the proposed course of action. UMERG filed an IRP pursuant to Section 6s(11) of Act 286, which is addressed in section IX.A.3 below.

c. Section VII

The utility shall include 16 items, if applicable, in its CON application. UMERG provided a detailed description of the following items in its CON application, as set forth in section IV.C above: (1) a written description of the proposed or existing site; (2) the expected generating technology and major systems; (3) the expected nameplate capacity, availability, heat rates, expected life, and other significant operational characteristics; (4) fuel type and sources, including the identification and justification of fuel price forecasts used over the study period; (5) discussion of the rationale behind facility or investment technology, fuel, capacity, and other significant design characteristics; (6) a description of all major state, federal, and local permits required to construct and operate the proposed generation facility or the proposed facility upgrades in compliance with state and federal environmental standards, laws, and rules; (7) the status of any

transmission interconnection study and identification of any expected or required transmission system modifications; (8) natural gas infrastructure required for plant construction and operation not located on the proposed site but required for plant construction and operation; (9) a description of modifications to existing road, rail, or water way transportation facilities not located on the proposed site, but required for plant construction and operation; (10) water and sewer infrastructure required for construction and operation not located on the proposed site but required for plant construction and operation; (11) a basic schedule for development and construction, which includes an estimated time between the start of construction and commercial operation of the facility or facility upgrades; (12) an estimate of the proportion of the construction workforce that will be composed of residents of the state of Michigan; (13) descriptions of the supply alternatives to this proposal that were considered, including a “no-build” option, and the justification for the choice of the proposed project; comparative costs of supply alternatives; supply alternatives that consider EO and RE; and (14) the effect of the proposed project on wholesale market competition.

d. Section VIII

An application seeking a CON to construct a new electric generation facility shall provide an estimate of the costs required for the specified purchase or construction, as well as projected facility operation costs. The cost estimates for the construction of a new facility shall include four items, if applicable. UMERCA addressed the two applicable items, and provided detailed descriptions regarding the engineering, procurement, and construction costs, transmission interconnection costs, owner’s costs, project financing costs, and the expected typical annual costs associated with operating the facility, including fuel, operations and maintenance, and environmental compliance, in section IV.D above.

The ALJ reviewed UMERC's application and responses to the Filing Requirements and found that there was a preponderance of the evidence that UMERC's application meets the Filing Requirements for CON and CPCN applications. The Commission agrees, and adopts the ALJ's findings and conclusions.

2. Certificate of Necessity

a. Demonstration of Need

Pursuant to Section 6s(4)(a) of Act 286, the Commission must determine that UMERC has demonstrated a need for the power that would be supplied by the proposed RICE electric generation facilities through an approved IRP under subsection (11). The Commission finds that UMERC's IRP complies with the requirements of Section 6s(11) of Act 286 for the reasons set forth in section IX.A.3 below, and that, as a result, UMERC has demonstrated a need for the power that would be supplied by the UP Generation Project.

b. Compliance with Local, State, and Federal Standards, Laws, and Rules

Section 6s(4)(b) of Act 286 requires the Commission to determine whether the proposed UP Generation Project will comply with all applicable state and federal environmental standards, laws, and rules. The ALJ found that UMERC satisfactorily described all of the local, state, and federal permits, standards, rules, and laws that apply to the UP Generation Project and provided sufficient assurances that the company would obtain the appropriate permits and comply with the standards, rules, and laws. PFD, pp. 105-108. The ALJ also determined that, pursuant to the Commission's CPCN application instructions, UMERC provided a description of all major state, federal, and local permits required to construct and operate the proposed generation facility in compliance with state and federal environmental standards, laws, and rules. *Id.*, p. 109.

The ALJ stated that no party submitted any evidence that the UP Generation Project will not comply with all applicable state and federal environmental standards, laws, and rules, and he noted that UMERB's and the Staff's testimony on this issue was un rebutted. Therefore, the ALJ found that the preponderance of the evidence shows that UMERB complied with the requirements of Section 6s(4)(b).

No exceptions were filed, and the Commission adopts the findings and recommendations of the ALJ.

c. The Estimated Cost of Power is Reasonable

Pursuant to Section 6s(4)(c) of Act 286, the Commission shall determine that the estimated cost of power from the proposed RICE electric generation facilities is reasonable. The Commission shall find that the cost is reasonable if, "in the construction or investment in a new or existing facility, to the extent it is commercially practicable, the estimated costs are the result of competitively bid engineering, procurement, and construction contracts." MCL 460.6s(4)(c).

The Staff testified that the company's competitive bidding process, as set forth in Exhibit S-1.4, will ensure that the project costs are reasonable. No party rebutted the Staff's testimony and exhibit.

UMERB compared post-UP Generation Project, non-Tilden customer service costs to BAU costs, and the ALJ agreed with the company that the UP Generation Project provides a lower NPV of \$161 million over a 30-year period for non-Tilden customers as compared to BAU. The ALJ also found that the annual savings for non-Tilden customers increase over time, and that there will be incremental savings to non-Tilden customers for the avoided transmission infrastructure costs of \$373 million, less the UP Generation Project transmission interconnection costs. The ALJ stated that because UMERB's cost estimates and projected cost savings to non-Tilden customers

were not rebutted by any evidence, the preponderance of the evidence shows that the estimated cost of the UP Generation Project is reasonable.

Although the Commission is inclined to agree with the ALJ, he indicated that UMERCE's evidence was unrebutted. However, the Commission notes that UPPCo provided testimony and exhibits claiming that UMERCE's two-site generation proposal will increase costs and result in additional annual MISO RSG costs to UPPCo and its customers. Therefore, to determine whether the estimated cost of power from the UP Generation Project is reasonable, the Commission finds that a review of UPPCo's testimony and evidence, and UMERCE's rebuttal, is necessary.

UPPCo provided several reasons, which are specifically set forth in section VI.J above, that the proposed UP Generation Project unreasonably increases costs. According to UPPCo, it and its customers will incur higher costs as a result of building generation at both the Baraga Township and Negaunee Township sites, and that in comparison, a single-site installation at the Negaunee Township site would result in the lowest total cost of generation on a dollars per MWh basis. And, UPPCo estimated that it will incur an additional \$200,000 annually in RSG charges as a result of UMERCE's two-site proposal. UPPCo asserted that ATC proposed a transmission reconfiguration plan for outages which would eliminate reliability issues, would permit the retirement of White Pine Unit No. 1, and would eliminate the need for the Lakota-Winona transmission upgrade project.

The Commission finds that UMERCE thoroughly and persuasively rebutted UPPCo's claim that a single-site option is less costly than the two-site option, providing evidence that: (1) UPPCo mixed Tilden and non-Tilden costs and failed to note that half, or \$13 million of the \$26 million, will be paid by Tilden as part of the Special Contract; (2) UPPCo's analysis did not account for the fact that having two sites improves the reliability of the overall project by adding redundancy in

the common plant system; (3) UPPCo's Exhibit UPP-2 double-counted the \$100 million Lakota-Winona cost and did not count the transmission interconnection costs; (4) UPPCo's Exhibit UPP-2 erroneously reflects the projected cost of the Plains-National project as \$373 million when the cost is actually \$273 million; and (5) UPPCo did not account for an allowance for \$73 million in interconnection costs that will be shared across all ATC customers. *See*, 3 Tr 250. The Commission also finds that UMERL identified similar errors in UPPCo's conclusion that the Baraga Township site will increase RSG charges to UPPCo and increase UPPCo's energy and capacity costs. *Id.*, p. 253.

In addition, the Commission concurs with UMERL's conclusion that if the need for the Lakota-Winona project was eliminated, it would have been removed from the current MTEP17, Appendix B. UMERL provided Exhibits A-12, A-13, A-14, and A-15 which show that the project has not been removed. Therefore, the Commission finds unpersuasive UPPCo's claim that ATC's transmission reconfiguration eliminated the need for the Lakota-Winona transmission upgrade.

In conclusion, the Commission agrees with the ALJ that the preponderance of the evidence shows that the estimated cost of the UP Generation Project is reasonable, and that UMERL complied with Section 6s(4)(c) of Act 286.

d. The Proposed Electric Generation Facility is the Most Reasonable and Prudent Means of Meeting the Power Need

Section 6s(4)(d) of Act 286 requires the Commission to find that the proposed RICE electric generation facilities represent the most reasonable and prudent means of meeting the power need relative to other resource options for meeting power demand, including energy efficiency programs, transmission efficiencies, and any alternative proposals submitted under the section.

The ALJ found that, based on the results of the IRP and UMERL's testimony, there is a preponderance of the evidence that the UP Generation Project is the least costly option.

The Commission finds that UMEREC's IRP complies with the requirements of Section 6s(11) of Act 286 for the reasons set forth in section IX.A.3, and that UMEREC demonstrated that the UP Generation Project is the most reasonable and prudent means of meeting the power need relative to other resource options. Following the closure of PIPP, the UP Generation Project will serve a unique need to maintain reliability in the UP without incurring additional transmission costs. The two sites and multiple units provide the needed reliability while also allowing for expansion for future load growth.

e. Construction of the New Facility is Completed Using Michigan Residents

The ALJ stated that UMEREC anticipates that 60% to 80% of the construction workforce will be drawn from local unions and residents of Michigan. The ALJ found that no party provided any direct or rebuttal evidence on this issue, and therefore, he determined that UMEREC complied with Section 6s(4)(e).

No exceptions were filed, and the Commission adopts the findings and recommendations of the ALJ.

3. Integrated Resource Plan

Pursuant to Section 6s(4)(a) of Act 286, the utility shall demonstrate through an approved IRP that the power to be supplied by the proposed electric generation facility is needed. A utility shall submit an IRP with its CON application that complies with the requirements of Section 6s(11) of Act 286.

The ALJ found that UMEREC's IRP meets all Section 6s(11) requirements and the Commission's IRP Filing Guidelines. According to the ALJ, the company's IRP addresses the unique circumstances of the UP service area and customer base and meets the objectives of the ARSA.

Save for subsections (c) and (f), no party took exception to the ALJ's determination that the IRP complied with Section 6s(11). ELPC, GlidePath, and Cloverland argued that UMEREC's IRP is deficient and that the company's flawed analysis leads to a sub-optimal consideration of least-costs and environmental benefits pursuant to Section 6s(11)(c) and (f) of Act 286.

In ELPC's opinion, UMEREC should have utilized different combinations of multiple technologies and assets rather than a single technology approach to address the entire 183 MW of identified need. ELPC asserted that modular technologies such as EO, solar PV, and battery storage could be used to displace one or more of the natural gas-fired RICE units in the UP Generation Project. Finally, ELPC stated that UMEREC's analysis tools did not allow for any optimization of resource combinations and did not utilize more standard industry tools for IRP analysis, such as Strategist, Aurora, or PLEXOS.

GlidePath asserted that, because the company never issued an RFP, UMEREC failed to solicit alternatives to the UP Generation Project. GlidePath argued that it provided a more practical and cost-effective alternative proposal. According to GlidePath, its projects should be used to serve part of the 183 MW need identified in UMEREC's IRP because GlidePath's projects could be located closer to UMEREC's customers and could provide distributed generation. GlidePath argued that its UP distributed generation projects are more cost effective than other alternatives and would provide enhanced reliability over centralized transmission-connected generation.

Echoing ELPC's arguments, Cloverland claimed that UMEREC's IRP failed to consider alternative energy solutions that would be more beneficial and efficient.

UMEREC argued that RE resources, including wind, solar, and solar battery storage, are unable to provide reliable energy in the amount required during every hour of the year. In the company's opinion, even if RE resources were used to provide a portion of the 183 MW proposed for the UP

Generation Project, the RICE electric generation facilities would still be needed in their entirety to meet the UP's reliability needs. The Staff agreed.

The Commission first finds that UMERC's IRP included an appropriate evaluation of RE alternatives. Although UMERC has no utility-owned generation resources in its supply portfolio, the company is planning to build a generation supply option to fully provide supply and reliability for its customers. *See*, 4 Tr 499. UMERC asserted that the new generation must be highly reliable because it will be the only generation in the UP available to serve Tilden and the UP most of the year. *See*, Exhibit A-19, pp. 2-3. UMERC considered solar and wind RE alternatives to supply a significant portion of its generation needs, however, the company found that these resources are not adequate to serve UMERC's needs for even a short period. According to UMERC, the largest existing solar and battery installation in the United States would be unable to meet the company's projected capacity shortfall. *See*, 3 Tr 255. And, the Staff noted that solar resources are limited to generating during the day and wind resources alleviate very little peak demand.

Because UMERC needs baseload generation that is highly redundant and reliable, the Commission finds that other electric resources, including RE, EO, load management, and demand response, are unable to displace or partially displace the proposed RICE electric generation facilities. Notwithstanding, the demand response arrangement with Tilden significantly reduces the size of generator needed to more efficiently serve all customers.

Second, regarding GlidePath's claim that UMERC failed to issue an RFP and that GlidePath provided a more practical and cost-effective alternative proposal, the Commission notes that the ARSA was signed on August 12, 2016. It is undisputed that the earliest that GlidePath says that it sought to communicate a high-level proposal to UMERC was October 5, 2016, after the company had agreed in the ARSA to construct the RICE electric generation facilities. *See*, Exhibit GP-1.

The Commission agrees with the ALJ that there is no language in Section 6s of Act 286 requiring UMERC to issue an RFP or to analyze every possible unsolicited proposal in its IRP.

Therefore, the Commission adopts the findings and recommendations of the ALJ, and concludes that UMERC's IRP meets the requirements of Section 6s(11) of Act 286. The Commission recognizes that this supply arrangement, the ARSA, and the reliability issues confronting the UP are unique. Thus, the Commission does not view UMERC's IRP as a precedential model under Acts 286 and 341. The Commission will be providing guidance on IRP modeling in the coming months as part of its implementation of the new energy laws.

4. The Costs Approved for the Construction of the Electric Generation Facilities

Section 6s(6) of Act 286 requires that, in a CON proceeding, the Commission shall specify the costs approved for the construction of, or significant investment in, the electric generation facility. The ALJ recommended Commission approval of UMERC's estimated UP Generation Project cost (in 2016 dollars) as follows:

EPC	\$225,700,000
Electric & Gas Interconnection	\$18,000,000
Owners	\$22,000,000
Total	\$265,700,000
Allowance for Funds Used During Construction	\$11,500,000
Total Project Cost with AFUDC	\$277,200,000

The ALJ noted that UMERC included a \$26,500,000 project contingency in the estimated total project cost, and that the Staff supported the contingency. The ALJ also found that UMERC agreed that it would update its cost estimate pursuant to Section 6s(4)(c).

No exceptions were filed. The Commission finds persuasive the Staff's and the ALJ's recommendation to approve UMERC's contingency costs.

Pursuant to Michigan case law, the Commission may specify and approve contingency costs under Section 6s(6) of Act 286. *See, In re Application of Indiana Michigan Power Company for a Certificate of Necessity*, 307 Mich App 272, 295; 859 NW2d 253, 265 (2014).

UMERC and the Staff testified that solving the UP energy and capacity concerns presents unique issues. *See*, 3 Tr 228-229; 4 Tr 473-474. Due to the magnitude of the construction of the UP Generation Project, labor, materials, weather, and other unforeseen issues could affect the schedule and the cost of the project. As a result, UMERC proposed \$26.5 million in contingency costs, and the Staff supported the amount. No party disputed this amount as part of the total cost and the ALJ supported it. The Commission finds that, based on the record in this proceeding, the requested contingency costs are a legitimate cost associated with the UP Generation Project. Therefore, in accordance with Section 6s(6) of Act 286, the Commission approves contingency costs of \$26,500,000, which are included in UMERC's total estimated project cost of \$277,200,000.

The Commission emphasizes that the energy and capacity issues in this case are unique and specific to the UP. The Commission's decision to approve UMERC's CON is based on the evidence on this record and is not intended as a blue print for future CON or IRP proceedings.

5. Reports to the Commission Regarding the Status of Any Project for Which a Certificate of Necessity Has Been Granted

Pursuant to Section 6s(7) of Act 286, the utility shall annually file, or more frequently if required by the Commission, reports to the Commission regarding the status of any project for which a CON has been granted, including an update concerning the cost and schedule of that project.

The Staff recommended that the Commission require UMERL to file annual Section 6s(7) reports that include “sufficient detail regarding the status of each RICE electric generation project, including transmission interconnections and gas supply infrastructure, describe any changes in timing and/or scope, the money expended on each project, etc.” 4 Tr 463.

The ALJ found that in its brief, UMERL agreed to provide progress reports to the Commission as described by the Staff.

No exceptions were filed, and the Commission adopts the findings and recommendations of the ALJ.

The Commission finds that UMERL complied with the requirements of Section 6s(4) of Act 286 and that the company’s application for a CON should be approved.

The Attorney General proposed the following conditions and recommendations on pages 538-539 of volume 4 of the transcript: (1) the Commission should include in its order approving the CON application a condition that non-Tilden customers be accorded the protection on project cost overruns included in MCL 460.6s(9); (2) the Commission should include in its order approving the CON application a financing condition that UMERL will finance the debt portion of the capital cost for the new power plants at the lowest cost rate among the financing options based on indicative pricing from financial institutions solicited for the transaction; and (3) in its conditional approval of the CON application, the Commission should direct UMERL to take all necessary procedural and legal actions before MISO to avoid the results of additional transmission upgrades under the Optional Study D if they are included in MISO’s DPP report, and UMERL shall elicit the assistance of other stakeholders and parties to this CON proceeding to assist the company in disputing the necessity of the transmission upgrades outlined in Option D before MISO.

No exceptions were filed on this issue. Regarding the Attorney General's condition on project cost overruns, the Commission finds that, pursuant to Section 6s(6) of Act 286, the Commission specified the costs approved for construction of the UP Generation Project as set forth above. Any costs exceeding the amount approved by the Commission under Section 6s(6) may only be approved if the Commission determines that they are reasonable and prudent in a future rate case proceeding.

UMERC did not oppose the Attorney General's financing and transmission upgrade conditions. The Commission finds these conditions reasonable, and therefore, adopts the financing and transmission upgrade recommendations.

B. Certificates of Public Convenience and Necessity

1. Upper Michigan Energy Resources Corporation

UMERC requested CPCNs, similar to the CPCN granted to WEPCo in Case No. U-8941, to construct, own, and operate the Negaunee Township and Baraga Township RICE electric generation facilities, but not to transact or carrying on a local business. And, because UMER does not plan to provide electric service to the public in either Baraga Township or Negaunee Township, the company did not obtain a franchise from either township pursuant to MCL 460.503(2). However, UMER confirmed that it will obtain all required local permits and other approvals before commencing construction of the new RICE electric generation facilities in both townships.

According to MCL 460.505:

In determining the question of public convenience and necessity the commission shall take into consideration the service being rendered by the utility then serving such territory, the investment in such utility, the benefit, if any, to the public in the matter of rates and such other matters as shall be proper and equitable in determining whether or not public convenience and necessity requires the applying utility to serve the territory. Every certificate of public convenience and necessity

issued by the commission, under the authority hereby granted, shall describe in detail the territory in which said applicant shall operate and it shall not operate in or serve any other territory under the authority of said certificate.

And, pursuant to MCL 460.502:

No public utility shall hereafter begin the construction or operation of any public utility plant or system thereof nor shall it render any service for the purpose of transacting or carrying on a local business either directly, or indirectly, by serving any other utility or agency so engaged in such local business, in any municipality in this state where any other utility or agency is then engaged in such local business and rendering the same sort of service, or where such municipality is receiving service of the same sort, until such public utility shall first obtain from the commission a certificate that public convenience and necessity requires or will require such construction, operation, service, or extension.

The ALJ determined that, pursuant to the Commission's CPCN application instructions, UMERL provided a description of all major state, federal, and local permits required to construct and operate the proposed generation facility in compliance with state and federal environmental standards, laws, and rules.

No exceptions were filed alleging that UMERL failed to comply with the provisions of MCL 460.500 *et seq.*, or the Commission's CPCN application instructions. The Commission considered the service provided by the utility already serving the territory, the investment in that utility, the benefit, if any, to the public in the matter of rates, and other applicable matters. *See*, 3 Tr 404-406. In addition, the Commission finds that UMERL sufficiently described in detail the territory in which it shall operate. *Id.*, pp. 349-354. As set forth in section II.C above, UMERL stated that the new RICE electric generation facilities will not result in any duplication of facilities or services and the company will not provide any service to the public. Therefore, the Commission finds that UMERL's application for CPCNs complies with the requirements of MCL 460.500 *et seq.* and that the requested CPCNs should be granted.

2. SEMCO Energy Gas Company

The Staff requested that the Commission's approval of UMEREC's application be conditioned upon SEMCO receiving CPCNs to construct, own, and operate the Baraga natural gas pipeline and the Negaunee natural gas pipeline, and receiving approval of the gas transportation agreements for the pipelines.

On October 25, 2017, the Commission approved settlement agreements between SEMCO and the Staff in Case Nos. U-18384 and U-18385, providing SEMCO authority to construct, own, and operate the Baraga and Negaunee pipelines. The parties agreed that SEMCO's applications in these cases satisfies the requirements of Act 9 and the Michigan Gas Safety Standards, MCL 483.152 *et seq.* Additionally, the parties agreed that the Commission should approve the Facility Construction and Transportation Service Contract between SEMCO and UMEREC, attached to the applications as Exhibit A-4.

The Attorney General requested that his conditions and recommendations on page 538 of volume 4 of the transcript be included in the Commission's order approving UMEREC's CON application. His fourth recommendation stated that the Commission should direct UMEREC and SEMCO to adjust their project timeline and enter into serious negotiations to achieve a compromise solution that will maximize the utilization of transportation capacity on the MCP and minimize or eliminate the need for compression facilities to be built by NNG. Alternatively, if the Commission finds such a directive is unworkable, the Attorney General recommended that the Commission encourage UMEREC to consider contracting for capacity on the MCP in the future if it requires additional gas pipeline capacity to supply the two power plants and if the MCP is a cost-effective option.

UMERC stated that it could not accept the Attorney General's fourth condition because significant differences in the timelines for SEMCO's MCP and UMER's UP Generation Project make the condition unworkable. However, UMER accepted the alternative proposed by the Attorney General.

No exceptions were filed on this issue. The Commission finds the Attorney General's alternative condition reasonable, and therefore, adopts his recommendation.

C. Tilden Special Contract

1. Special Contract Approval Pursuant Mich Admin Code, R 460.2031(1)

UMERC requested approval of the Special Contract pursuant to Rule 31 for the reasons set forth in section II.D.3 above. The Staff supported Commission approval of the Special Contract, agreeing with UMER that the contract will provide significant benefits to non-Tilden customers, as compared to the current power supply agreements. However, the Staff opposed UMER's request to allocate the CON costs consistent with the Special Contract.

CARE asserted that the Commission lacks authority to approve the Special Contract in a CON proceeding or allocate the costs of the UP Generation Project between UMER's non-Tilden customers and Tilden.

The ALJ found that the Special Contract is a long-term solution to the UP energy issue, is the key component of the UP Generation Project, is consistent with the terms and conditions of the ARSA, allows for the retirement of PIPP, reduces the risk of future SSR payments, and provides savings to non-Tilden customers. Furthermore, the ALJ found that UMER considered the financial risks to non-Tilden customers and included protections in the Special Contract. The ALJ asserted that "[n]o party submitted evidence which supports a denial of the Special Contract."

PFD, p. 172. Therefore, the ALJ concluded that the preponderance of the evidence shows that the Special Contract is reasonable, in the public interest, and should be approved.

In response to CARE, the ALJ found that there is no language in Rule 31 which requires UMERB to file an application for approval of a special contract in a separate proceeding. In addition, the ALJ found that there is no language in Section 6s that prohibits UMERB from requesting Commission approval of the Special Contract in this proceeding. The ALJ determined that UMERB's CON application and the Special Contract are two interrelated components of UMERB's UP Generation Project proposal, and separate proceedings are unnecessary and an inefficient use of time and resources. The ALJ noted that, similarly, the Commission approved a CPCN and a special contract in a single proceeding in Case Nos. U-8940 and U-10957.

The Commission finds persuasive the ALJ's rationale and, therefore, adopts his findings and conclusions. The Commission agrees that the preponderance of the evidence shows that the Special Contract is reasonable, in the public interest, and should be approved, and that there is no language in Rule 31 or Section 6s of Act 286 which requires UMERB to file an application for approval of a special contract in a separate proceeding.

2. Special Contract Ratemaking Approval

The Staff, CARE, and Fibrek argued that the Commission should reject the ratemaking treatment requested by UMERB in the Special Contract because the company failed to provide a COSS, and therefore, has not met the standard set forth in the March 23 order.

The ALJ found that the March 23 order does not provide an exception to the COSS requirement, and therefore recommended that approval of the ratemaking treatment in the Special Contract be deferred until UMERB has the ability to provide a COSS.

UMERC and Tilden took exception, arguing that if a traditional COSS were the only means of meeting the second option in the March 23 order, there would appear to be no meaningful distinction between the options. In any event, UMERB stated that it presented sufficient evidence to show that the benefits for non-Tilden customers are substantial and have a value that outweighs the costs that are not recovered from the contract customer, and therefore, the requested ratemaking should be approved without a COSS.

On page 21 of the March 23 order, the Commission set forth the general principles on the ratemaking effects of special contracts:

[T]he contracts are the product of Detroit Edison's negotiations. It follows that Detroit Edison should assume full responsibility for negotiating the discounted prices and that its shareholders should expect to absorb much, if not all, of any revenue shortfall caused by the pricing and other contract provisions that the utility negotiates. Therefore, unless Detroit Edison can make a compelling showing why a different ratemaking treatment is justified, the Commission will not permit Detroit Edison to reallocate the costs of serving contract customers to other ratepayer classes. To make a compelling showing for a different treatment, Detroit Edison would bear a substantial burden. This burden would require, at a minimum, a clear, convincing, and unequivocal demonstration either (1) that the contract prices and terms are justified on the basis of the cost of service, or (2) that the benefits for other (non-participating) ratepayers are substantial and have a value that outweighs the costs that are not recovered from the contract customers. Either showing would require support from a cost-of-service study that identifies and quantifies all costs incurred under the contracts. In addition, both showings would require Detroit Edison to demonstrate that its service provided in conjunction with the contracts has not, and will not in the future, impede the development of competition in its service territory.

It is clear to the Commission that a utility must make a "compelling showing" to justify the requested ratemaking treatment through one of two options and that "[e]ither showing would require support from a cost-of-service study that identifies and quantifies all costs incurred under the contracts." *Id.* (emphasis added). There is no exception to this requirement. The Commission agrees with the Staff that, although the Special Contract is unique, its uniqueness does not rise to the level of abandoning the Commission's principles by which special contracts have been

approved for more than twenty years. Therefore, the Commission denies UMERC's requested cost recovery relief.

The Attorney General recommended that his third condition on pages 546-547 of volume 4 of the transcript be included in the Commission's order approving UMERC's CON application. UMERC did not oppose the Attorney General's third recommendation.

The Commission finds that the Attorney General's request should be granted, in part. The Commission approves the recommendations in subsections a-c and h-i of the Attorney General's third condition. However, because subsections d-g involve cost allocations, for the reasons set forth above, the Commission finds that the recommendations in those subsections must be rejected.

3. Power Supply Cost Recovery Costs

CARE argued that the Commission has no authority to allocate PSCR costs in a CON proceeding or outside a PSCR proceeding. UMERC stated that with the exception of firm natural gas costs, the company is not requesting that the Commission approve any PSCR costs in this proceeding, nor does UMERC seek to require non-Tilden customers to pay any of Tilden's PSCR costs. UMERC explained that it is only requesting approval of its proposed reporting of its PSCR costs in PSCR proceedings.

The ALJ agreed with UMERC that neither the PSCR statutes, nor a prior Commission order, prohibit the Commission from issuing an order stating how such costs will be addressed in future rate cases and PSCR proceedings. In addition, the ALJ stated that there is no language in MCL 460.6j restricting approval of firm natural gas costs to a rate case, PSCR plan, or reconciliation proceeding. The ALJ found that no evidence was presented opposing UMERC's requested PSCR treatment and he therefore recommended Commission approval.

The Commission finds persuasive the ALJ's rationale, and adopts his findings and conclusions. There is no statute or order precluding the Commission from approving UMER's proposed reporting of its PSCR costs in a future PSCR proceeding.

The Attorney General recommended that his fourth condition and recommendation on page 538 of volume 4 of the transcript be included in the Commission's order approving UMER's CON application. He requested that the Commission include the specific identification of costs and revenues related to Tilden and non-Tilden customers in the PSCR reconciliation of power supply costs. There was no dispute between the Attorney General and UMER regarding the Attorney General's fourth recommendation and no exceptions were filed. The Commission finds the Attorney General's fourth condition reasonable, and therefore, adopts his recommendation.

D. Accounting Approvals

UMER requested approval of certain accounting and ratemaking treatment of financing costs incurred during the construction period. The Staff supported UMER's request. The ALJ stated that no other party offered evidence or exhibits regarding the company's AFUDC request. Therefore, the ALJ found that there was a preponderance of the evidence that UMER's accounting and ratemaking treatment request is reasonable and prudent and should be approved.

No exceptions were filed, and the Commission adopts the findings and recommendations of the ALJ.

E. Other Issues

1. The Commission Staff's Motions to Strike

The Staff takes exception to the ALJ's decision not to strike UPPCo's testimony regarding the RSG charges, and therefore, renewed its motion to strike, as set forth in section VIII.A.2 above.

By contrast, UPPCo takes exception to the ALJ's affirmation of his ruling to strike UPPCo's testimony regarding UPPCo's future generation activities.

The ALJ denied the Staff's motion to strike UPPCo's testimony regarding the RSG charges because he agreed with UPPCo that, pursuant to Sections 6s(4) and (5), the Commission has authority to consider other costs. And, because of the unique circumstances set forth in UMER's CON application, the ALJ found that the Commission should consider possible changes in RSG charges associated with the UP Generation Project.

However, the ALJ granted the Staff's motion to strike UPPCo's testimony regarding UPPCo's future generation activities because he found that UPPCo's testimony was not based on sufficient facts or data and, therefore, was speculative and inadmissible. He recommended that the Commission affirm his decision.

The Commission finds that the ALJ's decision regarding the Staff's motion to strike UPPCo's testimony should only be reversed if he abused his discretion and the result is "so palpably and grossly violative of fact and logic that it evidences perversity of will, defiance of judgment or the exercise of passion or bias." May 20, 2016 order in Case No. U-17317, p. 5, quoting the October 30, 1984 order in Case No. U-7660, pp. 3-4.

The Commission finds that neither the Staff nor UPPCo have demonstrated that the ALJ abused his discretion. As noted by the ALJ regarding the RSG charges, the Commission is provided authority in Sections 6s(4) and (5) of Act 286 to consider other costs. The Commission also agrees with the ALJ that because UPPCo failed to admit its proposed IRP into evidence to support its future generation plans, UPPCo's testimony on this issue was not based on sufficient facts or data, and is therefore, unreliable. The Commission affirms the ALJ's rulings on the Staff's motion to strike.

2. Michigan Technological University's Request for Assurance

MTU requested that, if the Commission approves UMERC's CON application, the Commission should condition the approval upon a UMERC commitment that it will ensure that there is an adequate supply of natural gas available to all customers relying on the NNG pipeline.

The ALJ found that there was no evidence on the record that UMERC's UP Generation Project will reduce availability of NNG gas to MTU. The ALJ stated that UMERC is not the supplier of natural gas to MTU and cannot guarantee the availability of natural gas and has no duty to do so.

No exceptions were filed, and the Commission adopts the findings and recommendations of the ALJ.

THEREFORE, IT IS ORDERED that:

A. Upper Michigan Energy Resources Corporation is granted a certificate of necessity pursuant to MCL 460.6s that the power to be supplied as a result of the proposed construction of the two reciprocating internal combustion engine electric generation facilities in Baraga Township, Baraga County, and Negaunee Township, Marquette County, is needed.

B. Upper Michigan Energy Resources Corporation is granted a certificate of necessity pursuant to MCL 460.6s that the size, fuel type, and other design characteristics of the reciprocating internal combustion engine electric generation facilities represent the most reasonable and prudent means of meeting the power need.

C. Upper Michigan Energy Resources Corporation is granted a certificate of necessity pursuant to MCL 460.6s that the estimated purchase or capital costs of and the financing plan for the reciprocating internal combustion engine electric generation facilities, including, but not limited to, the costs of siting and licensing the reciprocating internal combustion engine electric

generation units and the estimated cost of power from the reciprocating internal combustion engine electric generation facilities will be recoverable in rates from the company's customers.

D. Pursuant to MCL 460.6s(6), the Commission approves \$277,200,000 for the construction of the reciprocating internal combustion engine electric generation facilities.

E. Upper Michigan Energy Resources Corporation is granted a certificate of public convenience and necessity pursuant to MCL 460.500 *et seq.*, authorizing the company to construct, own, and operate a reciprocating internal combustion engine electric generation facility, but not to transact or carry on a local business, in Baraga Township, Baraga County.

F. Upper Michigan Energy Resources Corporation is granted a certificate of public convenience and necessity pursuant to MCL 460.500 *et seq.*, authorizing the company to construct, own, and operate a reciprocating internal combustion engine electric generation facility, but not to transact or carry on a local business, in Negaunee Township, Marquette County.

G. The Tilden Special Contract, attached as Exhibit A, is approved pursuant to Mich Admin Code, R 460.2031(1), however, approval of the ratemaking treatment in the Tilden Special Contract shall be deferred until Upper Michigan Energy Resources Corporation provides a cost of service study.

H. Upper Michigan Energy Resources Corporation shall finance the debt portion of the capital cost for the new power plants at the lowest cost rate based on indicative pricing from financial institutions solicited for the transaction among the following financing options: Upper Michigan Energy Resources Corporation stand-alone debt, Upper Michigan Energy Resources Corporation with Wisconsin Energy Corporation guarantee, and Wisconsin Energy Corporation stand-alone debt.

I. Upper Michigan Energy Resources Corporation shall take all necessary procedural and legal actions before the Midcontinent Independent System Operator, Inc., to avoid additional transmission upgrades under the Optional Study D if they are included in the Midcontinent Independent System Operator, Inc.'s Definitive Planning Phase report. Upper Michigan Energy Resources Corporation shall elicit the assistance of other stakeholders and parties to this certificate of necessity proceeding to assist the company in disputing the necessity of the transmission upgrades outlined in Option D before the Midcontinent Independent System Operator, Inc.

J. Upper Michigan Energy Resources Corporation's requested accounting approvals as set forth in paragraph 35 of its application are approved.

K. In the detail specified by the Commission Staff, Upper Michigan Energy Resources Corporation shall annually file, or more frequently if required by the Commission, reports to the Commission regarding the status of any project for which a certificate of necessity has been granted, including an update concerning the cost and schedule of that project pursuant to MCL 460.6s(7).

The Commission reserves jurisdiction and may issue further orders as necessary.

Any party desiring to appeal this order must do so by the filing of a claim of appeal in the Michigan Court of Appeals within 30 days of the issuance of this order, under MCL 462.26. To comply with the Michigan Rules of Court's requirement to notify the Commission of an appeal, appellants shall send required notices to both the Commission's Executive Secretary and to the Commission's Legal Counsel. Electronic notifications should be sent to the Executive Secretary at mpscedockets@michigan.gov and to the Michigan Department of the Attorney General - Public Service Division at pungp1@michigan.gov. In lieu of electronic submissions, paper copies of such notifications may be sent to the Executive Secretary and the Attorney General - Public Service Division at 7109 W. Saginaw Hwy., Lansing, MI 48917.

MICHIGAN PUBLIC SERVICE COMMISSION

Sally A. Talberg, Chairman

Norman J. Saari, Commissioner

Rachael A. Eubanks, Commissioner

By its action of October 25, 2017.

Kavita Kale, Executive Secretary

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Execution Version**RETAIL LARGE CURTAILABLE SPECIAL CONTRACT**

This RETAIL LARGE CURTAILABLE SPECIAL CONTRACT, including all Exhibits (the "Agreement"), is made and entered as of this 12th day of August, 2016, by and between WEC Energy Group, Inc., a Wisconsin corporation ("WEC" or "Seller"), AND Tilden Mining Company L.C., by The Cleveland-Cliffs Iron Company, its Managing Agent ("Tilden"), a Michigan limited liability company ("Buyer"). Hereinafter, the parties hereto are sometimes referred to collectively as the "Parties," or each individually as a "Party".

WITNESSETH

WHEREAS, Seller is a public utility holding company whose electric Affiliates are engaged in the business of generating, distributing and selling electric power and energy and related services at wholesale and retail within the States of Wisconsin and Michigan;

WHEREAS, Buyer is a Michigan retail electric customer of Wisconsin Electric Power Company, an Affiliate of the Seller, and is in the business of mining within the Upper Peninsula of the State of Michigan;

WHEREAS, Buyer currently purchases its electric power needs from Wisconsin Electric Power Company on its own behalf;

WHEREAS, the Parties are signatories to an Amended and Restated Settlement Agreement (ARSA) with the State of Michigan regarding the desire for a comprehensive energy solution for the Upper Peninsula of Michigan;

WHEREAS, the Parties have jointly and mutually arrived at a solution that meets the objectives of the ARSA;

WHEREAS, each Party believes it is in its best interest and desires to enter into this Agreement as further described herein;

NOW, THEREFORE, in consideration of the recitals and mutual promises, covenants and agreements contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

**ARTICLE ONE
GENERAL DEFINITIONS**

- I.1 As used in this Agreement, the following terms have the meanings set forth below:

ACA has the meaning given such term in the natural gas pipeline provider's tariff.

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Administrative and General Expense (A&G) means Seller's costs of staff salaries, executive wages and benefits, depreciation on office fixtures and equipment, insurance, legal counsel salaries, office supplies, accounting and tax fees, legal fees, subscriptions, etc. For purposes of the Agreement, A&G shall be equal to [REDACTED] per month, adjusted annually on the anniversary of the start of the Delivery Period using the Consumer Price Index - All Urban Consumers (CPI-U) U.S. City Average, All items less food and energy, not seasonally adjusted, 1982-1984=100 reference base.

Actual Generation Daily Heat Rate (AGDHR) means the daily calendar DTH actual gas consumption for Generation Resources in an Operating Day divided by the daily calendar actual MWh output, net of any unit auxiliary load, from Generation Resources.

Affiliate means any Person directly or indirectly controlling or controlled by or under direct or indirect common control of a specified Person. For purposes of this definition, "control" means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise. For purposes of this Agreement, it shall be assumed that the direct or indirect owner of more than 50% of the outstanding stock or other equity interest of a Person has control of such Person. The terms "controlling" and "controlled" have meanings correlative to the foregoing.

ARR/FTR Benefit Credit means credits or charges associated with Auction Revenue Rights [REDACTED]

ATC means American Transmission Company, LLC, or its successors.

Auction Revenue Rights (ARRs) has the meaning given in the MISO Tariff.

Billing Cycle means each calendar month during the Delivery Period and any partial calendar month at the beginning or end of the Delivery Period.

Buyer has the meaning given such term in the preamble.

Calendar Year means the twelve month period beginning on January 1 and ending on December 31.

Capacity means the capability to generate a particular amount of electrical energy at a particular time that meets the requirements for capacity established by MISO.

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Commercial Pricing Node (CP Node) has the meaning given in the MISO Tariff.

Commercial Operation Date (COD) means the date that Seller notifies Buyer that the Generation Resources are capable of sufficient deployment to meet Seller's obligations under this Agreement. [REDACTED]

CON means a Certificate of Necessity for a Generation Resource issued by the Michigan Public Service Commission.

Day means a 24-hour period beginning at 12:01 am EST and ending at 12:00 midnight EST.

Day-Ahead Cleared Load means the quantity [REDACTED] purchased in the MISO Day-Ahead Market for a given hour during an Operating Day.

Day-Ahead Cleared Generation Resource Energy means the quantity of Generation Resource Energy [REDACTED]

Day-Ahead Cleared Generation Resources means the quantity of Generation Resources Energy [REDACTED]

Day-Ahead Make Whole Payment means the Day-Ahead Revenue Sufficiency Guarantee Credit as defined in the MISO Tariff [REDACTED]

Day-Ahead Cleared Generation Resources Make Whole Payment Credit means the product of the Day-Ahead Make Whole Payment associated with the Day-Ahead Cleared Generation Resources [REDACTED]

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Day-Ahead Weighted Generation Resources LMP means the weighted average of the MISO Day-Ahead Market LMP for the Generation Resources [REDACTED]

Deferred Payment Agreement means the Deferred Payment Amendment to the Tilden 2015 – 2019 Large Curtailable Special Contract.

Demand Bid means a financially binding bid to purchase Energy [REDACTED]

Delivery Period means the period of time described in Section 2.0.4.

Distribution Facilities means the existing 138,000 to 13,800 volts transformation and associated equipment currently owned by Wisconsin Electric Power Company at the existing Tilden and Empire substations at or near Buyer's locations.

DTH means deca-therm.

Electric Infrastructure means one of each of the following to support the electrical interconnection of the generation to the electric transmission system: [REDACTED]

Energy has the meaning given such term in the MISO Tariff.

Environmental Credits means credits or charges resulting from existing or future environmental attributes that are associated with electricity generated from the Generation Resources including carbon emissions, carbon offsets, carbon allowances, carbon dioxide emissions, or other environmental credits or charges whether pursuant to or arising from any Governmental Authority.

EPC has the meaning given such term in the natural gas pipeline provider's tariff.

EST means Eastern Standard Time.

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Firm Load means the load level that is Buyer's level of firm service under the Agreement.

[REDACTED]

Force Majeure means any cause or occurrence beyond the reasonable control of and without the negligence of the Party claiming Force Majeure which causes the Party to be unable, or otherwise materially impairs its ability, to perform its obligations in whole or in part hereunder. Subject to the foregoing, such causes or occurrences may include any acts of God; acts of the public enemy; change in environmental-related Law; terrorism; wars; blockades; insurrections; riots; epidemics; landslides; lightning; earthquakes; fires; storms; floods; washouts; civil disturbances; strikes, lockouts or work stoppages; and any other cause, whether of the kind herein enumerated or otherwise, which, despite reasonable efforts of such Party to prevent or mitigate its effects, prevents or delays the performance of a Party, or prevents the obtaining of the benefits of performance by the other Party, and is not within the control of the Party claiming excuse. The following acts, events or causes shall in no event constitute an event of Force Majeure: (i) any lack of profitability to a Party or any losses incurred by a Party or any other financial consideration of a Party; or (ii) unavailability of funds or financing.

Gas Infrastructure means new laterals as required.

Generation Delivery Point means the point of delivery of Generation Resource Energy [REDACTED]

Generation Resource means the Reciprocating Internal Combustion Engines installed at a single location for this Agreement. [REDACTED]

Generation Resources means the aggregate of each Generation Resource installed for this Agreement. [REDACTED]

Generation Resources Capital Expense means an amount spent during the Delivery Period to acquire or improve the Generation Resources, Gas Infrastructure, or Electric Infrastructure.

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Generation Resources Energy means the sum of Energy output from each Generation Resource.

Generation Resources Operational Expense means all the operations and maintenance expense and labor expense required to maintain the Generation Resources, Gas Infrastructure, and Electric Infrastructure in good operating condition in accordance with Good Utility Practice.

[REDACTED]

Good Utility Practice means any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision is made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather, intended to include acceptable practices, methods, or acts generally accepted in the region that is contemplated by this Agreement but not necessarily codified.

Governmental Authority means (i) the federal government of the United States, (ii) any state, county or local government, (iii) any regulatory department, body, political subdivision, commission, bureau, administration, agency, instrumentality, ministry, court, judicial or administrative body, taxing authority, (iv) any other authority of any of the foregoing (including any corporation or other entity owned or controlled by any of the foregoing), and (v) MISO, NERC, and RFC; in each case in (i) - (v) above having jurisdiction over any or all of the Parties, this Agreement or the transmission system operated by MISO, whether acting under express or delegated authority.

Law means any federal, state and local laws, statutes, regulations, rules, codes, orders, judgments, decrees or ordinances enacted, adopted, issued or promulgated by any Governmental Authority, including any authorizations issued to a Party or by which a Party may be bound (including any of the foregoing pertaining to electrical, building, zoning, environmental and occupational safety and health requirements) or any published directive, guideline, tariff, requirement or other restriction of a Governmental Authority or any determination by, or interpretation of, any of the foregoing by any Governmental Authority, binding on a given Person in a relevant jurisdiction.

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LMP means the “Locational Marginal Price” as determined by MISO.

LMR means Load Modifying Resource and has the meaning given such term in the MISO Tariff.

[REDACTED]

Market Participant has the meaning given such term in the MISO Tariff.

MISO means the Midcontinent Independent System Operator, Inc., or any successor organization.

MISO Administrative Charges means charges or credits assessed to a Market Participant that are based on MISO operating costs, which are (i) currently reflected in MISO Schedule 17 and Schedule 24, as may be modified or deleted and replaced from time to time; or (ii) included in any other schedule as may be applicable under MISO Tariff that is similar in nature and function to the schedules in (i) above.

MISO Day-Ahead Market means the Day-Ahead Energy and Operating Reserves Market as defined in the MISO Tariff.

MISO Real-Time Market means the Real-Time Energy and Operating Reserves Market as defined in the MISO Tariff.

MISO Tariff shall mean the document adopted by MISO, and subject to review by the Federal Energy Regulatory Commission (“FERC”), including any attachments or exhibits referenced in that document, as amended from time to time, that contains the scheduling, operating, planning, reliability, and settlement (including customer registration) policies, rules, guidelines, procedures, standards, and criteria of MISO. For the purposes of determining responsibilities and rights at a given time, the MISO Tariff, as amended in accordance with the change procedure(s) described in the MISO Tariff, in effect at the time of the performance or non-performance of an action, shall govern with respect to that action.

MISO Planning Year means the twelve month period from June 1 through May 31 of the following year, as subject to modification by MISO.

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MISO Value of Lost Load has the meaning given such term in the MISO Tariff

MPSC means the Michigan Public Service Commission, or its successor.

MW means a megawatt.

MWh means a megawatt-hour.

NERC means the North American Electric Reliability Corporation, including in its capacity as the Electric Reliability Organization appointed by FERC, or any successor organization.

Non-Firm Planning Load means the difference in MW between the Planning Load amount and the Firm Load amount.

Operating Day has the meaning given such term in the MISO Tariff or related documents.

Party(ies) has the meaning given such term in the preamble.

Person means any natural person, corporation, limited liability company, general partnership, limited partnership, proprietorship, other business organization, trust, union, association or Governmental Authority.

Planning Load means the load level in MWs selected by Buyer and to which Buyer commits to operate at or below during any curtailments, including non-emergency curtailments requested by MISO, ATC, or other reliability authority during the Delivery Period.

Planning Reserves means the amount of generation required to be maintained pursuant to the generation resource planning reserve margin requirements approved and administered by each Governmental Authority with respect to which Seller is obligated to meet generation resource planning reserve margin requirements.

[REDACTED]

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[REDACTED]

RFC means the ReliabilityFirst Corporation, or any successor organization.

Seller has the meaning given such term in the preamble, provided however, if Seller assigns all its rights and obligations under this Agreement to a permitted assignee, it shall mean such permitted assignee.

UMERC means Upper Michigan Energy Resources Corporation.

[REDACTED]

[REDACTED]

ARTICLE TWO
CONTRACT SPECIFICS AND OPERATIONAL MECHANICS

2.0 Term of Agreement, Character of Service, and Delivery Period

- 2.0.1 Term: This Agreement is effective upon signing by both Parties (such date the "Effective Date") and continues through to the conclusion of the Delivery Period and payment by Buyer of all amounts due under this Agreement (the foregoing described period, the "Term"), unless earlier terminated in accordance with the terms of this Agreement.
- 2.0.2 During the Delivery Period, Seller will supply three-phase, 60 hertz, power service to Buyer at approximately 13,800 volts. Seller will provide such service through the Distribution Facilities; such facilities shall only be used to supply power service to Buyer or for auxiliary load of future generation facilities. Seller shall be responsible for the operation, repair and maintenance of such transformation and associated distribution facilities.
- 2.0.3 Metering: Seller shall install and maintain all apparatus and materials necessary for the measurement of Buyer's load. Distribution loss

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compensation, related to the Distribution Facilities, will be applied as applicable.

2.0.4 Delivery Period: Twenty (20) years beginning with the HE01 EST of the first day of the first month following the Commercial Operation Date ("COD") subject to this Agreement. For clarity, if the COD is May 10, 2019, the delivery period will be from June 1, 2019 through May 31, 2039.

2.0.5 Conditions: This Agreement shall be binding on and after the date of execution by both Parties. Notwithstanding the foregoing, the Parties' obligations under this Agreement are expressly subject to the fulfillment and satisfaction of each of the conditions identified in Exhibit C.

2.0.5.1 Except with respect to the conditions identified in Part 5 B. of Exhibit C, in each case the fulfillment of each condition shall be determined in form and substance satisfactory to Seller in Seller's sole discretion; provided that Seller may waive any such condition or may extend the date for fulfillment of any such condition by written notice to Buyer no later than the date for satisfaction of the condition. In the event that any of the conditions have not been fulfilled and satisfied by the date indicated, Seller may terminate this Agreement without further obligation by written notice to Buyer delivered no later than thirty (30) days after the date for satisfaction of the condition. If no such termination notice is delivered by Seller, this Agreement shall remain in full force and effect, and Seller shall be deemed to have waived its right to terminate this Agreement pursuant to this Section.

2.0.5.2 With respect to the condition identified in Part 5 B. of Exhibit C, the fulfillment of such condition shall be determined in form and substance satisfactory to both Buyer and Seller in their discretion; provided that they may waive such condition or may extend the date for fulfillment of such condition by mutual agreement no later than the date for satisfaction of the condition. In the event that the condition has not been fulfilled and satisfied by the date indicated, either Party may terminate this Agreement without further obligation by written notice to the other Party delivered no later than thirty (30) days after the date for satisfaction of the condition. If no such termination notice is delivered, this Agreement shall remain in full force and effect, and the Parties shall be deemed to have waived their right to terminate this Agreement pursuant to this Section.

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[REDACTED]
[REDACTED]
[REDACTED]

2.1 Pricing

2.1.1 The rates and charges in this Agreement apply during the Delivery Period.

2.1.2 Planning Load Charge Rate

2.1.2.1 The Planning Load Charge Rate shall be [REDACTED] and is applicable to all Planning Load. The Planning Load Charge Rate is based on total project costs of [REDACTED] of installed generation and includes construction and acquisition financing, Generation Resources, balance of plant, land, Gas Infrastructure, and Electric Infrastructure. If Seller's total actual project costs exceed [REDACTED], and the additional cost is due to additional environmental improvements required at the Generation Resources, the project site(s), and adjacent sites to the project site(s), then the Planning Load Charge shall be increased to include the incremental cost above [REDACTED] up to a maximum of [REDACTED]. Seller shall notify Buyer of any such cost adjustments, subject to Buyer verification, prior to the start of the Delivery Period.

2.1.2.2 If CON is not approved by December 31, 2017, then an adjustment will be applied to the project cost. The adjustment will be equal to the percentage change in the [REDACTED] [REDACTED] Index between December 2017 and the month when the CON is approved.

2.1.3 Non-Firm Planning Load Credit Rate

2.1.3.1 The Non-Firm Planning Load Credit Rate shall be equal to 50% of the Planning Load Charge Rate. The Non-Firm Planning Load Credit Rate is applicable to all Non-Firm Planning Load.

2.1.4 Monthly Fixed Charges

2.1.4.1 Monthly Fixed Charges (\$/month) shall be adjusted annually and consist of a direct pass through of actual costs, including:

2.1.4.1.1 Direct pass through of 100% of actual distribution costs for service to Buyer; to be determined using a direct

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assignment method that is limited to Seller's actual costs of Seller's transformation and associated distribution facilities at Buyer's location, using FERC-approved fixed charge methodology process;

2.1.4.1.2 Direct pass through of 100% of Administrative and General Expense to Buyer;

2.1.4.1.3 Generation Resources Operational Expense: Direct pass through of 100% of actual costs to Buyer; and

[REDACTED]

[REDACTED]

[REDACTED]

2.1.4.1.4 If Seller incurs a Generation Resources Capital Expense, Seller shall pass through [REDACTED] of such capital expenditures to Buyer [REDACTED]

[REDACTED] resulting in a monthly fixed charge. Upon notice to Buyer by Seller of the Generation Resources Capital Expense, Buyer shall pay the monthly fixed charge on a monthly basis for the remaining duration of the

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Delivery Period. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

2.1.5 ATC Charges

2.1.5.1 ATC Charges are variable charges and consist of [REDACTED]

[REDACTED]
[REDACTED]

2.1.6 MISO Load Charges

2.1.6.1 MISO charges related to load are variable charges determined as follows:

2.1.6.1.1

[REDACTED]
[REDACTED]
[REDACTED]

2.1.6.1.2

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

2.1.6.1.3

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

2.1.7.2 Energy Charge – Generation

2.1.7.2.1 The Energy Charge – Generation (\$) is calculated for each hour in the Billing Cycle on an after-the-fact basis and consists of [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

2.1.9 Energy Optimization and Renewable Energy Charge

2.1.9.1 The Energy Optimization Charge shall be a variable charge. The Energy Optimization charge shall consist of a direct pass through of actual MPSC-approved charges and credits for service to Buyer, if any, in accordance with Michigan law.

2.1.9.2 The Renewable Energy Charge shall be the maximum allowed by statute, currently \$187.50 per meter per month, provided that Seller and its Affiliates are held harmless.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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2.2 Generation

- 2.2.1 Seller has selected Reciprocating Internal Combustion Engines (RICE) technology for this application.
- 2.2.2 The RICE units are currently planned to be installed at two locations to approximately match Planning Load (Reference Exhibit A – Generation Installation Location Map) as follows:
 - 2.2.2.1 West Region Site Location – Installed MW dependent on MISO analysis, and
 - 2.2.2.2 Either a Central North Site Location or a Central South Site Location for the balance of Planning Load.
 - 2.2.2.2.1 Buyer shall cooperate with Seller in the evaluation of site(s) for the Generation Resource. The Parties will work together to identify a site acceptable to Seller for use by Seller for the construction and operation of the Generation Resources, within 30 days of the Effective Date.
- 2.2.3 Seller shall have sole authority and discretion for selection of the RICE vendor, generation unit sizes, number and location of sites and shall advise Buyer of its selection.
- 2.2.4 The total generation shall be sized in MW increments to achieve as close to the projected Planning Load level requested by Buyer as commercially reasonable.
- 2.2.5 Firmness of Natural Gas Supply
 - 2.2.5.1 Reference Exhibit A – Generation Installation Location Map
 - 2.2.5.2 Seller expects to plan for 100% firm natural gas supply at the West Region Site Location.
 - 2.2.5.3 Seller expects to plan for 50%-60% firm natural gas supply at the Central – North Region Site Location.
 - 2.2.5.4 No commitment is made as to the level of firmness for natural gas supply at the Central – South Region Site Location at this time. If this site location is chosen, then the Parties will negotiate and mutually agree as to the appropriate level of firmness, expected to

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be in the range of 50%-60%, and the allocation of costs between Parties.

2.3 Capacity

- 2.3.1 Buyer must provide Seller with its projected Planning Load level within twenty (20) days following execution of this Agreement, such Planning Load level to be no less than 165 MW and no greater than 185 MW. Absent such notice as required, the projected Planning Load shall be deemed to be 170 MW.
- 2.3.2 Seller will provide Buyer written notification of Buyer's final Planning Load level options based on Buyer's projected Planning Load level and Seller's generator unit size selection when selected by Seller but in any event no later than [REDACTED].
- 2.3.3 Buyer shall notify Seller by [REDACTED], of its final Planning Load level option selection as presented by Seller in 2.3.2.
- 2.3.4 Buyer must provide Seller with its final Firm Load level at least 150 days prior to the beginning of the MISO Planning Year in which COD is expected to occur. Seller will notify Buyer of the projected COD and any changes to the projected COD. If Buyer does not provide Seller with its Firm Load level as required, then the initial Firm Load level shall be assumed to be zero (0).

[REDACTED]

[REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

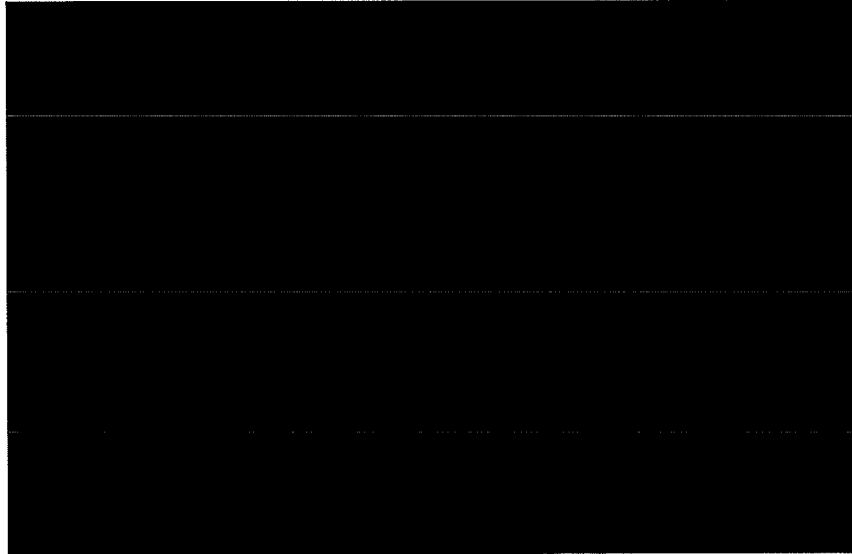
[REDACTED]

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2.5 Operation Protocol

- 2.5.1 The Parties shall work together to establish an Operation Protocol required of both Parties related to implementation of this Agreement. Such Operation Protocol shall contain an effective date and shall be executed by both Parties prior to implementation.
- 2.5.2 Such Operation Protocol is contained in Exhibit B – Operations Protocol and may be amended as necessary in accordance with the requirements of Section 2.5.1 to effectuate the administration of this Agreement.

2.6 Buyer's Curtailment Obligations

- 2.6.1 Buyer shall be subject to curtailment requirements as instructed by MISO, ATC or other reliability authority. Such requirements may include load reduction to Firm Load levels and opening of transmission or distribution system circuit breakers serving Buyer's load. Such instructions will be relayed to Buyer through Seller as the MISO Market Participant as soon as commercially feasible to provide Buyer adequate time to comply with the curtailment requirement.
- 2.6.2 Buyer will be subject to non-curtailment charges as outlined in this Agreement.



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[REDACTED]

2.6.3.1 Buyer's Planning Load curtailment obligation survives the termination of this Agreement until the lesser of the tenth anniversary of the date of termination of the Agreement or the end of the original Delivery Period.

[REDACTED]

ARTICLE THREE
GENERAL TERMS AND CONDITIONS

3.0 Billing

3.0.1 Seller shall provide to Buyer the necessary billing determinants in sufficient detail for Buyer to reasonably determine the accuracy of each invoice supplied by Seller to Buyer during each Billing Cycle, [REDACTED]

[REDACTED]

3.1 Transmission Service and Ancillary Services

Buyer shall be responsible for the costs of all transmission and ancillary services to serve its load. Seller shall acquire transmission and ancillary services as required by any Governmental Authority for Buyer's load. In such event, Seller will bill, and Buyer shall pay Seller, for transmission and ancillary services and other costs as determined by any Governmental or Regulatory Authority during each Billing Cycle.

3.2 Audit Rights

3.2.1 Buyer has the right, at its sole expense and during normal working hours, to examine the records of the Seller to the extent reasonably necessary to verify the accuracy of any billing statement, charge or computation made pursuant to this Agreement. If requested by Buyer, Seller shall provide to

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Buyer additional detailed information in support of the billing statements for a Billing Cycle. If any such examination reveals any inaccuracy in any billing statement, the necessary adjustments in such billing statement and the payments thereof will be made promptly and shall bear interest calculated at the FERC established interest rate from the date the overpayment or underpayment was made until paid; provided, however, that no adjustment for any billing statement or payment will be made unless objection to the accuracy thereof was made prior to the lapse of twelve (12) months from the rendition thereof, and thereafter any objection shall be deemed waived.

3.3 Taxes

3.3.1 Charges are inclusive of property taxes levied on Seller.

3.4 No Requirement to Construct or Upgrade Facilities

3.4.1 Except as expressly otherwise agreed to between Buyer and Seller, Seller shall have no obligation to construct or upgrade any facilities in order to provide any electric service under this Agreement for Buyer.

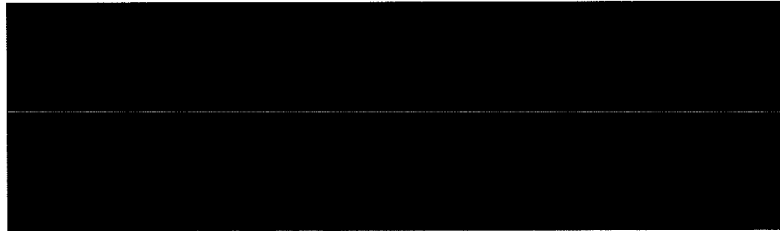
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3.6 Compliance with Laws

3.6.1 Each Party shall at all times comply in all material respects with the MISO Tariff, all applicable Laws of any Governmental or Regulatory Authority and Good Utility Practice relating to the performance of its obligations under this Agreement. Each Party shall give all required notices, shall procure and maintain all necessary authorizations required for its performance of this Agreement and shall pay all charges and fees in connection therewith.

3.7 Change in Law

3.7.1 In the event there is a change or changes in any Law, or interpretation thereof, enacted, adopted or implemented after execution of this Agreement, or any Law (or the interpretation thereof) is applied to a new or different class of parties (a "Change in Law"), then if the Seller is affected by such Change in Law and its costs in meeting its obligations under this Agreement are increased, such increased costs shall be passed through to Buyer to the fullest extent permitted by Law; if the Seller is affected by such Change in Law and its costs in meeting its obligations under this Service Agreement are decreased, such decreased costs shall be passed through to Buyer to the fullest extent permitted by Law. In the event such increased costs cannot be passed through until approval or acceptance by a Governmental Authority, such increased costs shall be accrued and, following receipt of such approval or acceptance, applied to the earliest (and subsequent) periods permitted by Law.

3.8 Change in Circumstances

3.8.1 Change in Treatment by the MPSC: In the event that the MPSC's treatment from time to time of the revenues received or amounts charged by Seller under this Agreement or the amounts paid by Buyer under this Agreement adversely affects the Buyer or Seller (other than a change constituting a Change in Law pursuant to Section 3.7) then, upon notice by the affected Party to the other Party, the Parties shall use their

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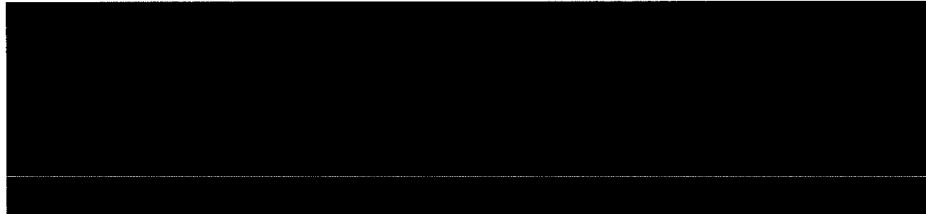
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commercially reasonable efforts to reform this Agreement in order to alleviate such adverse effect on the affected Party.

- 3.8.2 MISO Changes: In the event that, at any time from and after the execution of this Agreement, the MISO Tariff is changed (other than a change constituting a Change in Law pursuant to Section 3.7) or Seller withdraws from the MISO Tariff so that the benefits and burdens or the operative provisions of this Agreement are no longer consistent with the original intentions of the Parties, the Parties shall use their commercially reasonable efforts to reform this Agreement in order to give effect to the original intentions of the Parties regarding the appropriate allocation of benefits and burdens to each Party.

3.9 Seller's Rights

- 3.9.1 Except as otherwise specifically provided in this Agreement, Seller shall have the sole rights, authority and discretion to determine all matters in connection with the performance of its obligations under this Agreement.



3.11 Buyer's Participation in Customer Choice under Michigan Law

- 3.11.1 Buyer is prohibited from participating in Customer Choice under the provisions of Michigan Law for the Term of this Agreement.

3.12 Early Termination

- 3.12.1 Buyer may terminate service under this Agreement upon 60 days written notice to Seller. Such termination would be effective on the first day of the first month subsequent to [REDACTED] written notice ("Termination Date"). If Buyer terminates this service during the Delivery Period or if Seller terminates service for Buyer default, Buyer will pay liquidated damages to Seller determined by summing the following amounts:



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3.12.2 Payment shall be due within 30 days of the Termination Date.

3.13 MPSC Rules and Regulations

3.13.1 Except as otherwise required by law, unless terms contained herein are not consistent therewith, the provisions, all as amended from time-to-time of: (i) the Standard Rules and Regulations as contained in the Rate Book for Electric Service of Seller's Affiliate as approved by the MPSC; (ii) the applicable Administrative Rules established by the MPSC; and (iii) any applicable Michigan law shall govern the sale and distribution of electrical energy to Buyer and this Agreement.

3.14 Default and Cure

3.14.1 A party shall be in default under this Agreement if (i) that party fails to make a payment of any amount required under this Agreement and such failure continues for more than ten (10) days after such party receives written notice of such failure from the non-defaulting party; or (ii) such

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party fails to perform or comply with any other obligation, agreement, term, or provision of this Agreement applicable to it and such failure continues for more than thirty (30) days after such party receives written notice of such failure from the non-defaulting party; provided, however, that if such default of such other obligation cannot reasonably be cured within such thirty-day (30) period and if the first party is proceeding promptly and with due diligence in curing the same, the time for curing such default shall be extended for a period of time, not to exceed ninety (90) days, as may be necessary to complete such curing. If Buyer and/or Cliff Natural Resources, as guarantor, as the case may be, shall be in default under either the Deferred Payment Agreement, of even date herewith between Wisconsin Electric Power Company and Buyer, or Cliff Natural Resources' Guaranty in connection with the Deferred Payment Agreement, such default shall, without any further notice or opportunity to cure, constitute a default by Buyer under this Agreement.

- 3.14.2 Any event of default may be waived at the non-defaulting party's option. Upon the failure of a party to cure any such default after notice thereof from the other party and expiration of the above cure periods, then the non-defaulting party may, subject to the terms of this Agreement, do one or more of the following: withhold further performance of its obligations under this Agreement; terminate the Agreement; and/or pursue any legal remedies it may have under this Agreement (including the its rights to the cash collateral account or other security for performance), applicable law or principles of equity relating to such breach.

**ARTICLE FOUR
FORCE MAJEURE**

4.0 Conditions of Excuse

- 4.0.1 If, as a result of an event of Force Majeure, a Party is rendered unable to perform its obligations in whole or in part under this Service Agreement, the obligations of both Parties shall be excused, except as specifically provided elsewhere in this Service Agreement, from that portion of its performance that is prevented by such Force Majeure event to the extent so prevented; provided, that:

- 4.0.1.1 The Party claiming Force Majeure gives the other Party prompt written notice after the Party claiming Force Majeure obtains actual knowledge thereof describing the particulars of and how such event qualifies as an event of Force Majeure;

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4.0.1.2 The permitted suspension of performance is of no greater scope and of no longer duration than is required by the event of Force Majeure and the effects thereof; and

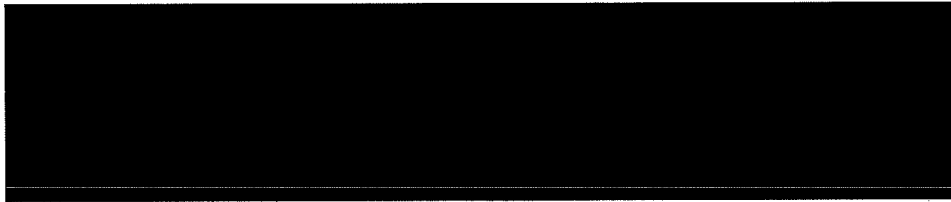
4.0.1.3 The Party claiming Force Majeure exercises commercially reasonable efforts to eliminate or mitigate the effects of the Force Majeure condition.

4.1 Burden of Proof

4.1.1 The burden of proof as to whether a Force Majeure has occurred shall be upon the Party claiming Force Majeure.

4.2 Payment and Security Obligations

4.2.1 No payment obligation arising under this Agreement, and no obligation to provide the Customer Contract Security Requirement, shall be excused by any event of Force Majeure declared by either Party.



ARTICLE FIVE
ASSIGNMENT; BINDING EFFECT

5.0 Binding Effect

5.0.1 This Agreement shall be binding upon and shall inure to the benefit of the Parties and their respective successors and permitted assigns.

5.0.2 The Buyer is a Party to the 2015-2019 Large Curtailable Special Contract dated March 12, 2015 (the "2015 Special Contract") with Wisconsin Electric Power Company, an Affiliate of Seller. The 2015 Special Contract terminates on December 31, 2019. In the event a COD is not achieved prior to December 31, 2019, this Agreement shall be binding upon both Parties on and after January 1, 2020 and Buyer shall not be permitted to terminate this Agreement other than pursuant to Section 2.0.5.2.

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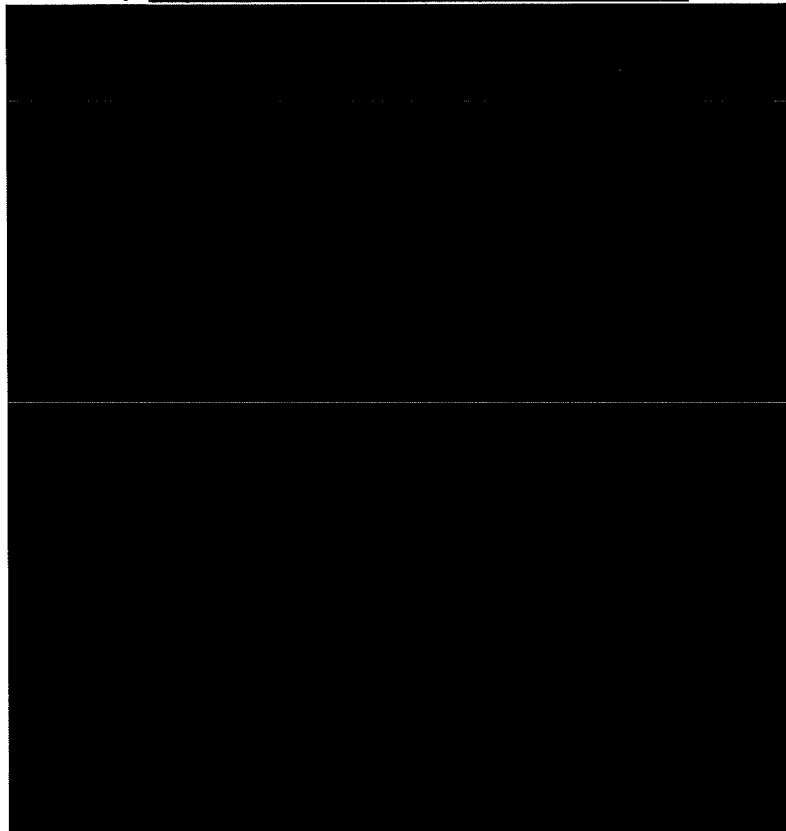
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5.1 Assignment

5.1.1 Upon the incorporation of UMERB and the transfer of Wisconsin Electric's electric distribution assets in Michigan and retail electric business in Michigan (other than assets and contracts used to provide service to Buyer), Seller shall assign its rights, obligations and interests in this Agreement to UMERB.

5.1.2 Except as provided herein, neither Party shall assign this Agreement or any portion thereof to any Person without the prior written consent of the other Party. [REDACTED]



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**ARTICLE SIX
MISCELLANEOUS**

6.0 Governing Law

6.0.1 This Agreement shall be governed by and construed in accordance with the laws of the State of Michigan as to all matters, including but not limited to matters of validity, construction, effect, performance and remedies without regard to conflict of laws rules thereof.

6.1 Cooperation; Further Assurances

6.1.1 The Parties agree to provide such reasonable cooperation to each other as necessary to give effect to the terms of this Agreement.

6.2 Amendment

6.2.1 No amendment, supplement, modification, waiver or termination of this Agreement shall be binding unless executed in writing by the Parties to be bound thereby.

6.3 Waiver

6.3.1 The failure or delay of either Party hereto to enforce at any time any of the provisions of this Agreement, or to require at any time performance of the other Party hereto of any of the provisions hereof, shall neither be construed to be a waiver of such provisions nor affect the validity of this Agreement or any part hereof or the right of such Party thereafter to enforce each and every such provision. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision of this Agreement, whether or not similar, nor shall such waiver constitute a continuing waiver unless otherwise expressly provided.

6.4 No Third-Party Beneficiaries

6.4.1 This Agreement is for the sole benefit of the Parties hereto, and except as specifically provided herein, nothing in this Agreement or any action taken hereunder shall be construed to create any duty, liability or standard of care to any Person not a party to this Agreement. Except as specifically provided herein, no Person shall have any rights or interest, direct or indirect, in this Agreement or the services to be provided hereunder, or both, except Buyer and Seller. The Parties specifically disclaim any intent

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to create any rights in any Person as a third-party beneficiary to this Agreement or the services to be provided hereunder, or both.

6.5 No Dedication of Assets

6.5.1 No undertaking by a Party hereto to the other Party hereto under any provision of this Agreement shall constitute the dedication of that Party's assets or any portion thereof to the public or to its obligations under this Agreement.

6.6 No Partnership

6.6.1 This Agreement shall not be construed to create or give rise to any partnership, joint venture, agency or other relationship between Seller and Buyer other than that of purchaser and seller. Each Party shall be solely and individually responsible for its own covenants, obligations and liabilities as herein provided, and the Parties do not intend to create any joint, several or joint and several obligations to any third party. Neither this Agreement, nor any grant, lease or license related thereto, shall create or be construed to create any new entity, such as a partnership, association or joint venture.

6.7 Forward Contract

6.7.1 The Parties acknowledge and agree that this Agreement, the transactions contemplated hereby, and any instrument(s) that may be provided by either Party hereunder (including any guaranty or Customer Contract Security Requirement) shall each, and together, constitute one and the same "forward contract" within the meaning of the United States Bankruptcy Code, and Seller and Buyer shall each constitute a "forward contract merchant" under the United States Bankruptcy Code.

6.8 Confidentiality

6.8.1 The Parties agree that neither Party shall disclose the terms or conditions of this Agreement to a third party (other than the Party's or its Affiliate's employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential) except in order to comply with any applicable law, regulation, or any exchange, balancing area, regional reliability council, or independent system operator rule, or in connection with any court or regulatory proceeding; provided, however, each Party shall, to the extent practicable, use reasonable efforts to prevent or limit the disclosure. The Parties shall

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be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

6.9 Headings

6.9.1 The headings contained in this Agreement are used solely for convenience and do not constitute a part of the Agreement between the Parties, nor should they be used to aid in any manner in the construction of this Agreement.

6.10 Counterparts

6.10.1 This Agreement may be executed simultaneously in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

6.11 All notices or other communications which may be or are required to be given by a party to the other party pursuant to this Agreement shall be in writing and shall be either (i) delivered by hand; (ii) mailed by first-class, registered or certified mail, return receipt requested, postage prepaid; or (iii) delivered by a recognized overnight or personal delivery service, addressed as and to the parties' representatives set forth below. Notices shall be effective when delivered in accordance with the foregoing provisions, whether or not accepted by, or on behalf of, the party to whom the notice is sent. Each party may designate by written notice in accordance with this Section to the other party a new address to which any notice may thereafter be given.

If to Seller, then to: WEC Energy Group, Inc.
333 W. Everett Street, A214
Milwaukee, WI 53203
Attention: Vice President - WEA

If to Buyer, then to: Tilden Mining Company, L.C.
200 Public Square, Suite 3300
Cleveland, OH 44114
Attention: Chief Legal Officer

6.12 Entire Agreement

6.12.1 This Agreement constitutes the entire agreement between the Parties pertaining to the subject matter of this Agreement and supersedes and terminates any letters of intent, term sheets and all prior and

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contemporaneous agreements, understandings, negotiations and discussions between the Parties, whether oral or written, regarding said subject matter, and there are no warranties, representations or other agreements between the Parties in connection with the subject matter of this Agreement, except as specifically set forth in this Agreement.

[SIGNATURE PAGE FOLLOWS]

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IN WITNESS WHEREOF, each of the Parties has caused this Agreement to be executed by its duly authorized officer as of the date first written above.

SELLER:

WEC ENERGY GROUP, INC.

By: Allen B. Everett

Name: Allen B. Everett

Title: Chief Executive Officer

Date: Aug 12, 2016

BUYER:

TILDEN MINING COMPANY L.C.

BY THE CLEVELAND-CLIFFS IRON COMPANY, ITS MANAGING AGENT

By: Terry G. Fedor, II

Name: TERRY G. FEDOR, II

Title: PRESIDENT

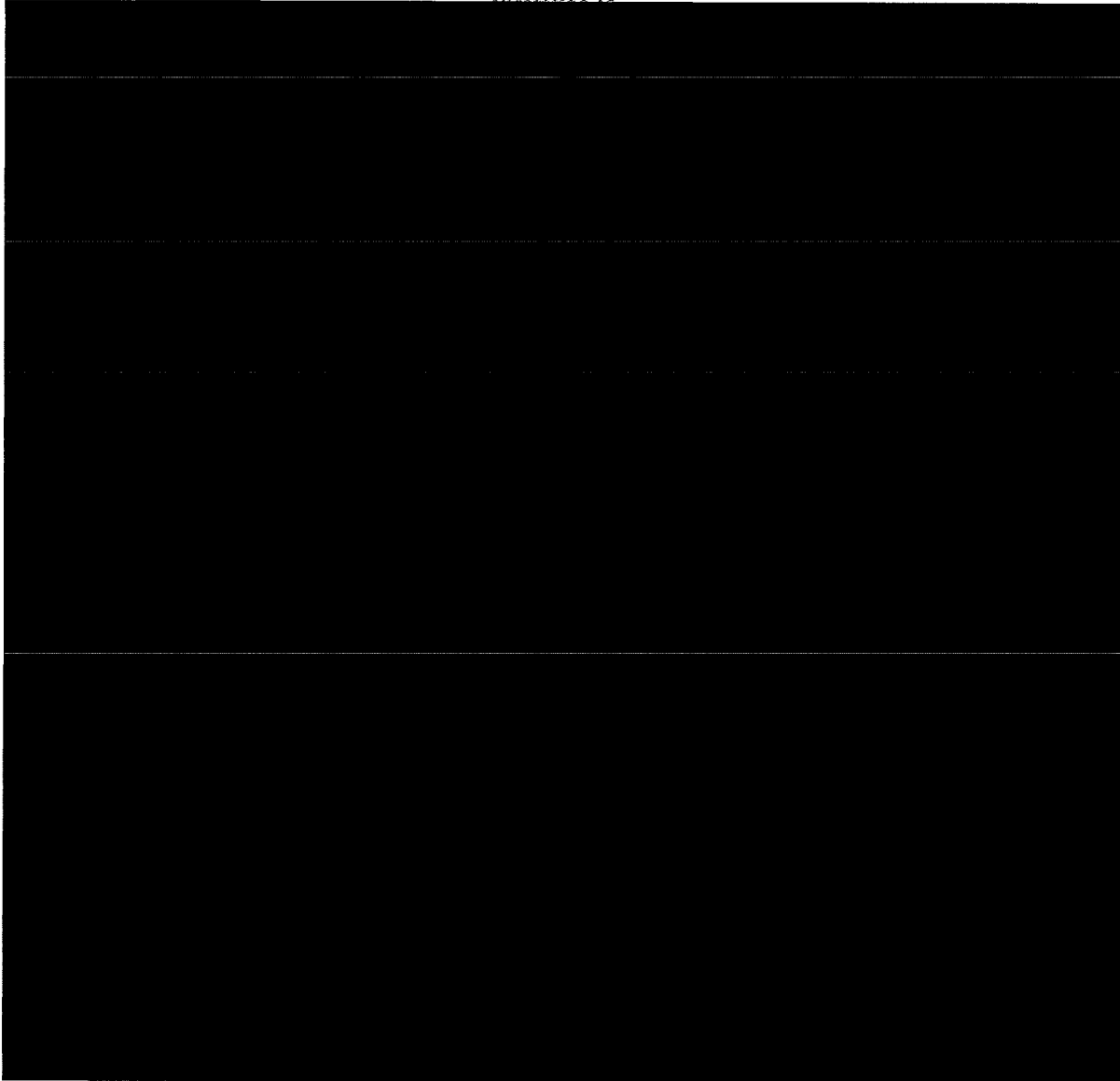
Date: 8/12/2016

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EXHIBIT A



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**EXHIBIT B
Operations Protocol**

**Dated: TBD
Supersedes the Operations Protocol dated: TBD**

This Operations Protocol shall govern the responsibilities of Buyer and Seller to effectuate the implementation of the Agreement. It may be amended as necessary in accordance with the requirements of Section 2.5 of the Agreement.

Responsibilities of Buyer

1.

2.

Responsibilities of Seller

1.

2.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, each of the Parties has caused this Exhibit B – Operations Protocol to be executed by its duly authorized representative as of the date first written above.

**SELLER:
WEC ENERGY GROUP INC.**

By: _____

Name: _____

Title: _____

Date: _____

**BUYER:
TILDEN MINING COMPANY L.C.
BY THE CLEVELAND-CLIFFS IRON COMPANY, ITS MANAGING AGENT**

By: _____

Name: _____

Title: _____

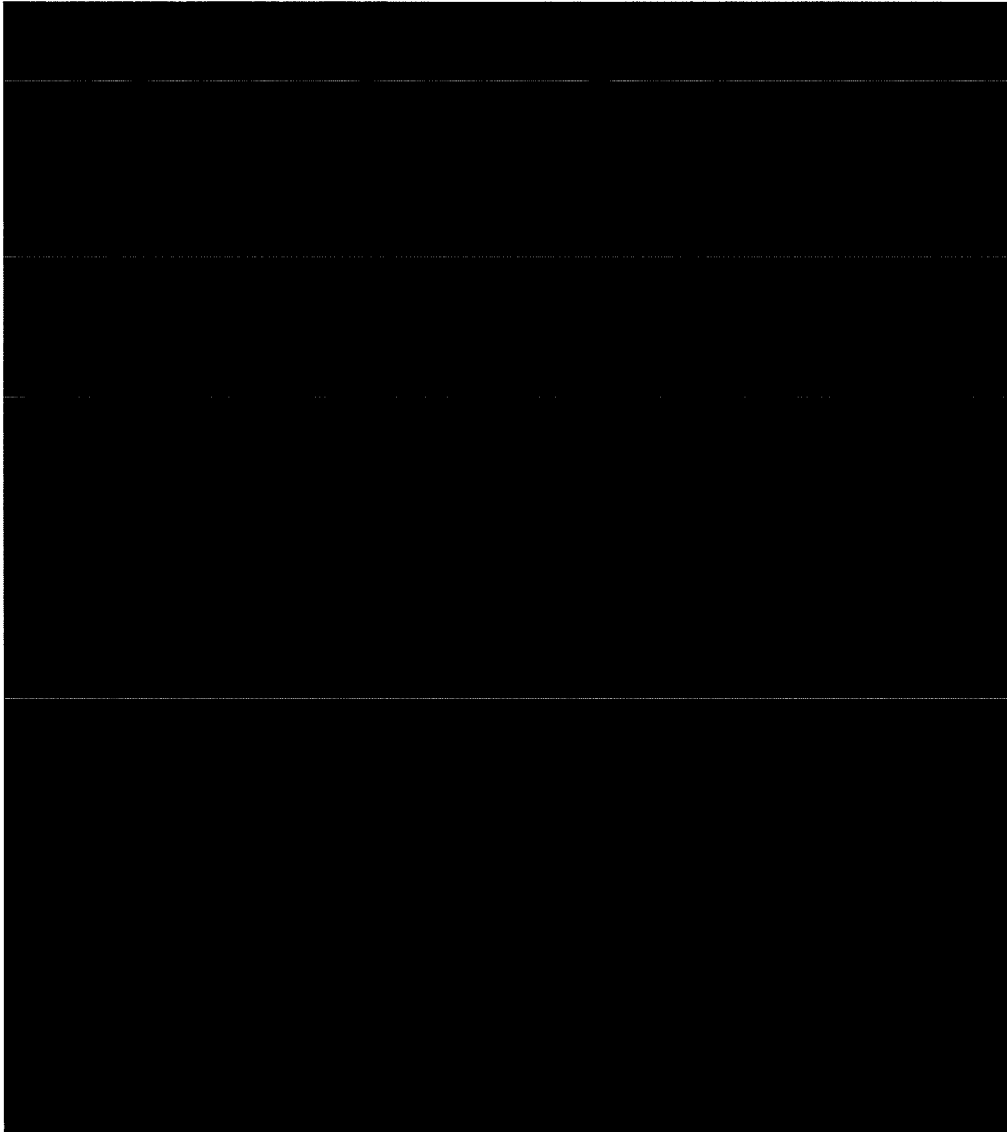
Date: _____

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EXHIBIT C





WEC Energy Group, Inc.
231 W. Michigan St.
Milwaukee, WI 53203

December 9, 2016

Mr. Tolaver Rapp
Director of Global Energy Procurement
Cliffs Natural Resources
200 Public Square, Suite 3400
Cleveland, OH 44114-2315

Re: Agreement to amend Section 2.3.2 and 2.3.3 of the Retail Large Curtailable Special Contract

Dear Tolaver,

This letter shall confirm the agreement to amend the Retail Large Curtailable Special Contract (Agreement) between WEC Energy Group, Inc. (WEC) and Tilden Mining Company L.C. (Tilden) dated August 12, 2016 as follows:

1) Section 2.3.2 is amended by deleting [REDACTED] and replacing the same with [REDACTED]; and

2) Section 2.3.3 is amended by deleting [REDACTED] and replacing the same with [REDACTED].

All other provisions of the Agreement remain unchanged and in full force and effect and this amendment shall be read together with the Agreement.

Please confirm your acknowledgement and agreement with the foregoing by executing below and returning an electronic copy to my attention.

Sincerely,

A handwritten signature in cursive script, appearing to read 'James O. Sherman, Jr.'.

James O. Sherman, Jr.
Director – Wholesale and Customer Solutions

Acknowledgement and Agreement

Tilden acknowledges and agrees to the foregoing as of this 13th day of DECEMBER, 2016.

Tilden Mining Company L.C.

By: A handwritten signature in cursive script, appearing to read 'Terry G. Fedor, II'.

Name: TERRY G. FEDOR, II

Title: EVP-USIO